Supplementary Files

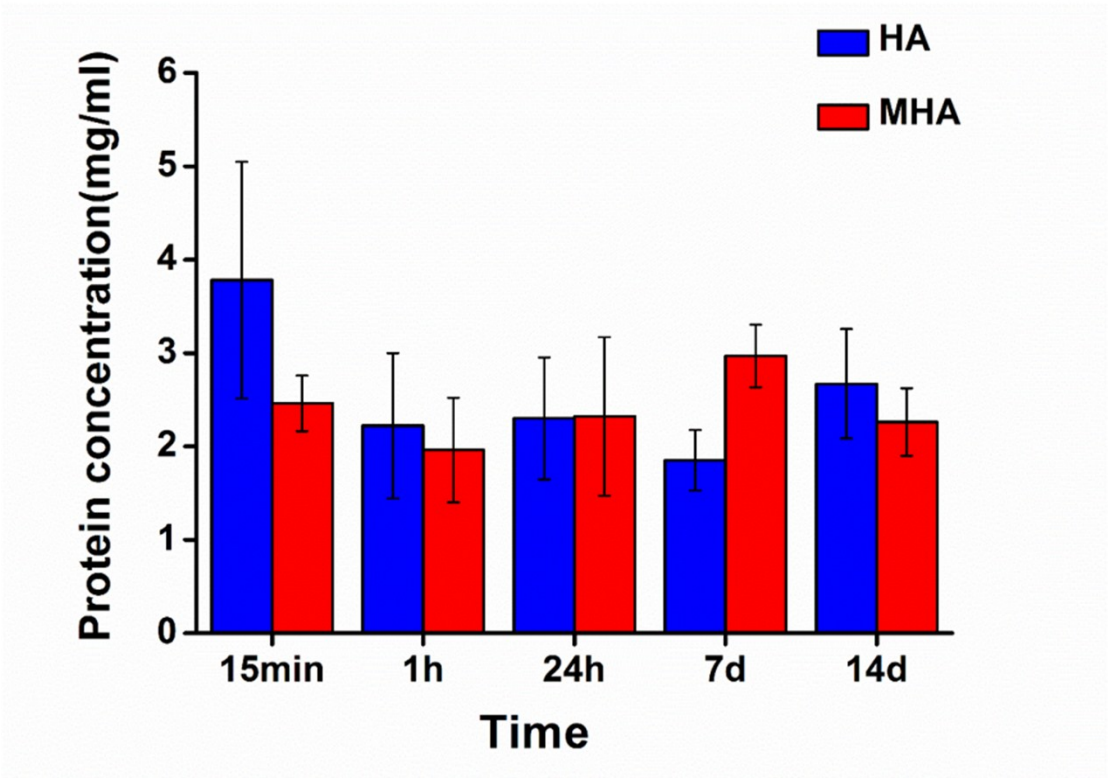

Fig. S1. Amount of proteins recovered from each scaffold by BCA assay.

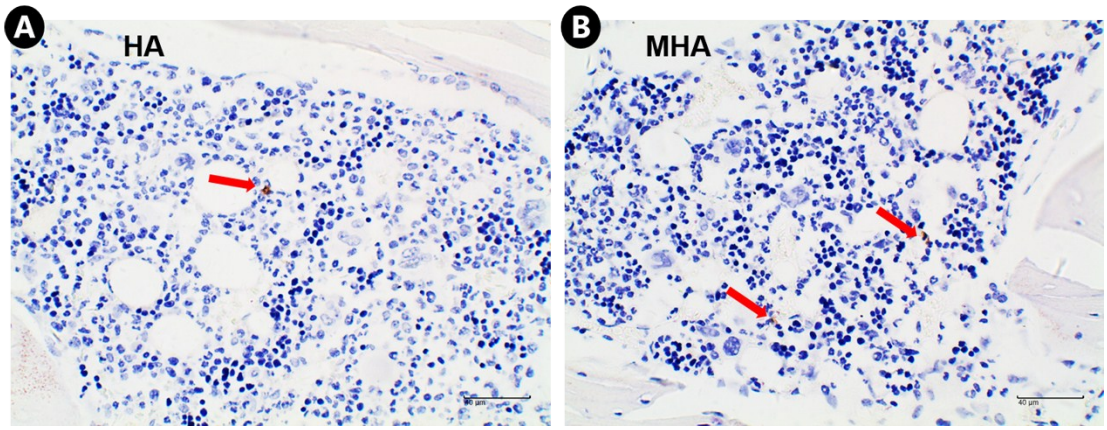

Fig. S2. *In situ* immunohistochemical analysis of $CD4^+$ T cells (red arrows) for HA and MHA scaffolds at 7 days. Original magnification ×400.

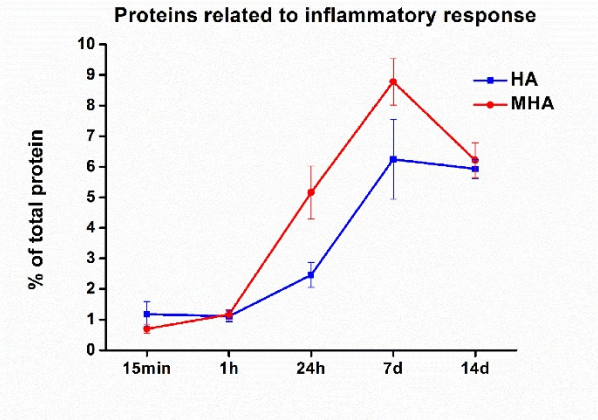

Fig. S3. Proteins related to inflammation formed on HA and MHA scaffolds after implanted *in vivo* for different time points (15 min, 1 h, 24 h, 7 d, and 14 d).

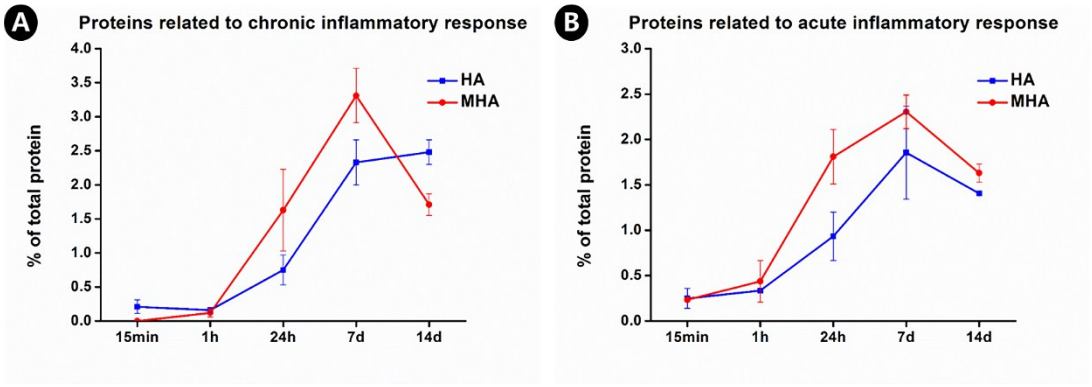

Fig. S4. Proteins related to chronic (A) and acute (B) inflammation formed on HA and MHA scaffolds after implanted *in vivo* for different time points (15 min, 1 h, 24 h, 7 d, and 14 d).

Table S1. The 25 overlap proteins identified in the corona at each time points for HA and MHA scaffolds.

Protein name	uniprot access ID	15min-HA	15min-MHA	1h-HA	1h-MHA	24h-HA	24h-MHA	7d-HA	7d-MHA	14d-HA	14d-MHA
Serine (Or cysteine) peptidase inhibitor, clade C (Antithrombin), member 1	Q5M7T5	0.02%	0.01%	0.04%	0.06%	0.07%	0.19%	0.33%	0.49%	0.16%	0.28%

Sodium- and chloride-dependent glycine transporter 1	P28572	0.01%	0.01%	0.01%	0.01%	0.01%	0.02%	0.03%	0.03%	0.02%	0.03%
Collagen alpha-1(I) chain	P02454	0.02%	0.01%	0.01%	0.02%	0.01%	0.02%	0.12%	0.07%	0.12%	0.12%
Serum paraoxonase/arylesterase 1	P55159	0.01%	0.01%	0.04%	0.02%	0.03%	0.17%	0.13%	0.21%	0.09%	0.20%
Gelsolin	Q68FP1	0.03%	0.02%	0.02%	0.04%	0.04%	0.05%	0.20%	0.21%	0.21%	0.24%
Ankyrin 1	D3Z9Z0	0.02%	0.01%	0.02%	0.04%	0.01%	0.01%	0.10%	0.06%	0.04%	0.02%
Plasminogen	Q01177	0.02%	0.01%	0.02%	0.03%	0.04%	0.07%	0.17%	0.25%	0.12%	0.15%
Catalase	P04762	0.02%	0.02%	0.04%	0.09%	0.05%	0.09%	0.18%	0.11%	0.12%	0.07%
Ig gamma-2B chain C region	P20761	0.04%	0.05%	0.09%	0.11%	0.09%	0.27%	0.16%	0.30%	0.25%	0.21%
Thioredoxin	P11232	0.04%	0.05%	0.05%	0.07%	0.05%	0.10%	0.16%	0.19%	0.20%	0.25%
Transthyretin	P02767	0.16%	0.15%	0.15%	0.19%	0.15%	0.28%	0.48%	0.60%	0.50%	0.58%
Alpha-1-macroglobulin	Q63041	0.13%	0.06%	0.17%	0.16%	0.12%	0.22%	0.37%	0.40%	0.24%	0.25%
Alpha-2-HS-glycoprotein	P24090	0.10%	0.07%	0.06%	0.13%	0.28%	0.24%	0.50%	0.35%	0.41%	0.31%
Myosin regulatory light chain 2, skeletal muscle isoform	P04466	0.16%	0.16%	0.15%	0.20%	0.18%	0.40%	0.42%	0.42%	0.32%	0.17%
Biliverdin reductase B	B5DF65	0.08%	0.08%	0.04%	0.07%	0.09%	0.01%	0.32%	0.23%	0.16%	0.17%
Histone H4	P62804	0.31%	0.71%	0.28%	0.12%	0.97%	1.08%	1.28%	2.25%	1.66%	1.50%
Serotransferrin	P12346	0.08%	0.11%	0.35%	0.47%	0.28%	0.69%	0.90%	1.18%	0.73%	0.83%
Hemopexin	P20059	0.12%	0.11%	0.21%	0.31%	0.42%	0.90%	0.90%	1.10%	0.66%	0.63%
Myosin light chain	P02600	0.21%	0.17%	0.19%	0.18%	0.27%	0.47%	0.52%	0.59%	0.26%	0.18%

1/3, skeletal muscle isoform											
Apolipoprotein A-I	P04639	0.18%	0.16%	0.28%	0.27%	0.28%	0.47%	0.58%	0.73%	0.24%	0.48%
Carbonic anhydrase 1	B0BNN3	0.14%	0.16%	0.16%	0.27%	0.18%	0.19%	0.73%	0.57%	0.55%	0.41%
Carbonic anhydrase 2	P27139	0.08%	0.17%	0.14%	0.11%	0.18%	0.13%	0.64%	0.60%	0.55%	0.44%
Epsilon 1 globin	O88752	1.36%	1.71%	2.20%	1.75%	2.08%	1.94%	0.47%	0.37%	0.21%	0.30%
Serum albumin	P02770	2.21%	1.85%	3.79%	4.54%	4.36%	8.61%	3.39%	3.86%	3.26%	2.95%
Globin c2	A0A0G2JSV6	11.89%	13.36%	12.16%	12.07%	12.17%	10.23%	7.74%	5.59%	2.84%	3.65%

Table S2. List of all detected proteins in the hard corona of HA and MHA scaffolds at 15 min implantation.

Protiens	Uniprot access ID	Content (%)	
		HA	MHA
Aa2-028	Q7TMC3	0.01%	
Actin, alpha skeletal muscle	P68136	0.20%	
Actin, cytoplasmic 1	P60711		0.21%
Actin, cytoplasmic 2	V9GZ85	0.19%	
Adenylate kinase isoenzyme 1	P39069	0.02%	
ADP/ATP translocase 1	Q6P9Y4		0.06%
Agtpbp1 protein (Fragment)	B0BN26		0.01%
Aldehyde oxidase 2	A0A096P6M6	0.01%	
Alpha globin	Q63910	0.99%	1.10%
Alpha-1,4 glucan phosphorylase	G3V8V9	0.02%	
Alpha-1-antiproteinase	A0A0G2JY31	0.05%	0.03%
Alpha-1B-glycoprotein	Q9EPH1	0.06%	0.05%
Alpha-1-inhibitor 3	P14046	0.09%	
Alpha-1-macroglobulin	Q63041	0.13%	0.06%
Alpha-2-HS-glycoprotein	P24090	0.10%	0.07%
Alpha-crystallin B chain	P23928		0.02%
Anion exchange protein	Q5U329	0.13%	0.04%
Anionic trypsin-1	P00762	0.10%	0.09%
Ankyrin 1, erythroid	D3Z9Z0	0.02%	0.01%
AP complex subunit beta	D4AD35	0.01%	0.00%

AP-3 complex subunit mu-2	P53678		0.01%
Apolipoprotein A-I	P04639	0.18%	0.16%
Apolipoprotein A-II	P04638	0.04%	0.03%
Apolipoprotein A-IV	P02651	0.04%	0.02%
Apolipoprotein C-II (Predicted)	G3V8D4	0.03%	
Apolipoprotein E	A0A0G2K151	0.07%	0.12%
Apolipoprotein H	Q5I0M1	0.01%	
Aquaporin-1	A0A0G2K3E0	0.02%	0.03%
ATP synthase subunit alpha	F1LP05		0.02%
ATP synthase subunit alpha, mitochondrial	P15999	0.02%	
ATP synthase subunit beta (Fragment)	Q0QEP3	0.02%	
ATP/GTP binding protein 1 (Predicted), isoform CRA_a	G3V8G1	0.01%	
Attractin	Q99J86		0.01%
Beta-enolase	P15429	0.03%	0.03%
Beta-glo	Q6PDU6	6.19%	4.58%
Biliverdin reductase B (Flavin reductase (NADPH))	B5DF65	0.08%	0.08%
Calcium-transporting ATPase	B4F7E5	0.02%	0.01%
cAMP-dependent protein kinase catalytic subunit alpha	P27791		0.01%
cAMP-dependent protein kinase catalytic subunit beta	P68182	0.01%	
Carbamoyl-phosphate synthase [ammonia], mitochondrial	P07756	0.01%	
Carbonic anhydrase 1	B0BNN3	0.14%	0.16%
Carbonic anhydrase 2	P27139	0.08%	0.17%
Carbonic anhydrase 3	P14141		0.04%
Carboxylic ester hydrolase	D3ZGK7	0.01%	
Catalase	P04762	0.02%	0.02%
Cathepsin G	G3V9Q7	0.02%	
Cationic amino acid transporter-2	Q4PLF2	0.01%	0.01%
Cd72 molecule	Q5BK59	0.01%	0.01%
Ceruloplasmin	P13635	0.01%	
Coiled-coil domain-containing protein 86	Q5XIB5		0.02%
Collagen alpha-1(I) chain	P02454	0.02%	0.01%
Collagen alpha-2(I) chain	F1LS40		0.01%
Complement C3	M0RBJ7	0.08%	0.06%
Complement C4	P08649	0.01%	
Complement component C9	F7F389	0.01%	
Complement factor B, isoform CRA_b	G3V615	0.01%	

Complement inhibitory factor H	Q91YB6		0.01%
Corticosteroid-binding globulin	P31211	0.03%	0.03%
Creatine kinase M-type	A0A0G2JSP8	0.05%	0.08%
Cul1 protein	B1WBY1		0.01%
Cytochrome c oxidase subunit 2	Q5UAJ6		0.02%
Cytochrome c oxidase subunit 5A, mitochondrial	P11240	0.05%	
Cytoplasmic dynein 1 heavy chain 1	M0R9X8		0.01%
DEAH (Asp-Glu-Ala-His) box polypeptide 36 (Predicted), isoform CRA_a	D4A2Z8		0.00%
Dermcidin	Q71DI1	0.07%	0.09%
Diacylglycerol kinase	Q810C3	0.01%	
Dual specificity mitogen-activated protein kinase kinase 5	Q62862	0.01%	
Dynein axonemal heavy chain-like protein (Fragment)	Q2KML4	0.00%	0.00%
Eletrcon transfer flavoprotein subunit alpha, mitochondrial	P13803	0.01%	
Ephexin-1	G3V856		0.00%
Epsilon 1 globin	O88752	1.36%	1.71%
Epsilon 3 globin	O88754		0.02%
Erythrocyte protein band 4.2	B5DF57	0.02%	0.01%
Erythroid spectrin alpha	Q6XDA1	0.01%	
Erythroid spectrin beta	Q6XDA0		0.02%
Eukaryotic translation initiation factor 5A-1	Q3T1J1	0.03%	0.02%
Ext2 protein	B2RYE4		0.01%
Fetuin-B	Q9QX79	0.02%	0.03%
Fga protein	A1L114		0.02%
Fibronectin	F1LST1		0.01%
Fructose-bisphosphate aldolase A	P05065	0.04%	0.04%
Galectin-5	P47967	0.07%	0.11%
Gelsolin	Q68FP1	0.03%	0.02%
Gltpd2 protein	B0BNN1		0.01%
Glutathione peroxidase	Q6PDW8	0.11%	
Glutathione peroxidase 1	P04041		0.04%
Glutathione peroxidase 3	P23764	0.03%	
Glyceraldehyde-3-phosphate dehydrogenase	M0R660	0.07%	0.13%
GPI-anchored ceruloplasmin	Q66H30		0.01%
Guanine deaminase	Q9JKB7	0.01%	0.02%
Guanine nucleotide-binding protein	P10824	0.01%	

G(i) subunit alpha-1			
Gypsy retrotransposon integrase-like protein 1	Q66H30		0.01%
Haptoglobin	P06866	0.03%	0.02%
Heat shock cognate 71 kDa protein	M0R8M9		0.01%
Hemoglobin subunit alpha-1/2	P01946	14.14%	9.59%
Hemoglobin subunit beta-1	P02091	28.58%	30.97%
Hemoglobin subunit beta-2	P11517	11.69%	12.73%
Hemopexin	P20059	0.12%	0.11%
Heterogeneous nuclear ribonucleoprotein H	A0A0G2JTG7		0.01%
Heterogeneous nuclear ribonucleoprotein R	Q811S1	0.01%	
Histidine-rich glycoprotein	Q99PS8	0.02%	
Histone H2A	Q6I8Q6	0.25%	0.41%
Histone H2B	D4A817	0.17%	0.41%
Histone H3	D3ZJ08		0.21%
Histone H3.1	Q6LED0	0.08%	
Histone H4	P62804	0.31%	0.71%
I-branching beta-1,6-acetylglucosaminyltransferase family polypeptide 2	Q6T5E0	0.01%	
Ig gamma-2B chain C region	P20761	0.04%	0.05%
Ig lambda-2 chain C region	P20767	0.05%	0.08%
Igh-6 protein	Q569B3	0.02%	
Ighg protein	Q4VBH1		0.03%
Inducible nitric oxide synthase	Q9R0W4	0.01%	
Inter alpha-trypsin inhibitor, heavy chain 4	Q5EBC0	0.05%	0.05%
Inter-alpha-trypsin inhibitor heavy chain H3	D3ZBS2	0.01%	
Kinesin-like protein	E9PSL8		0.00%
Kininogen 1	Q5PQU1		0.03%
Leukocyte surface antigen CD47	A0A0G2JTH4		0.02%
Lipin 1	Q5XIM8		0.01%
L-lactate dehydrogenase	B5DEN4	0.02%	0.07%
LOC367586 protein	Q5M7V3	0.04%	0.07%
LOC500183 protein	Q4KM66	0.07%	0.07%
Long-chain-fatty-acid--CoA ligase 3	Q63151	0.00%	0.00%
Low molecular weight phosphotyrosine protein phosphatase	P41498	0.05%	0.04%
Lys-63-specific deubiquitinase BRCC36	B2RYM5	0.01%	

Malate dehydrogenase, cytoplasmic	O88989		0.02%
Mediator of RNA polymerase II transcription subunit 23	A0A0H2UHV2		0.01%
Meiosis-specific nuclear structural protein 1	Q6AXQ8		0.01%
Microtubule-associated protein 10	D3ZAP3	0.00%	
Monoacylglycerol lipase ABHD6	Q5XI64		0.01%
Multidrug resistance-associated protein 6	O88269	0.01%	0.00%
Murinoglobulin-1	Q03626		0.04%
Myoglobin	Q9QZ76		0.12%
Myosin light chain 1/3, skeletal muscle isoform	P02600	0.21%	0.17%
Myosin light chain 3	P16409		0.05%
Myosin regulatory light chain 2, skeletal muscle isoform	P04466	0.16%	0.16%
Myosin-7	P02564	0.04%	0.03%
Neutrophil antibiotic peptide NP-1	Q62716	0.05%	
Non imprinted in Prader-Willi/Angelman syndrome 2 homolog (Human) (Predicted), isoform CRA_a	D3ZUV1		0.01%
Nucleoprotein TPR	F1MA98		0.00%
Nucleoside diphosphate kinase A	Q05982		0.07%
Nucleoside diphosphate kinase B	P19804		0.08%
Olfactory receptor	M0RBX0		0.02%
P55 protein	Q5BK33	0.01%	0.01%
Parvalbumin alpha	P02625		0.05%
Peroxiredoxin-2	P35704	0.20%	0.15%
Phosphate carrier protein, mitochondrial	Q6IRH6		0.02%
Phosphatidylethanolamine-binding protein 1	P31044	0.02%	
Phosphodiesterase	Q76KC5		0.01%
Phosphoglycerate kinase 1	P16617		0.03%
Phosphoglycerate mutase 2	P16290		0.05%
Phosphopantothenoylcysteine decarboxylase (Predicted), isoform CRA_a	D3ZZZ5	0.01%	0.02%
Phytanoyl-CoA hydroxylase-interacting protein-like	Q6AYN4		0.01%
Plasminogen	Q01177	0.02%	0.01%
Platelet factor 4	P06765	0.15%	0.09%
Polymerase (DNA directed), eta (RAD	D4ADZ0		0.01%

30 related) (Predicted)			
Polyubiquitin (Fragment)	Q63654		0.12%
Polyubiquitin-C	Q63429	0.02%	
Profilin-1	P62963	0.02%	
Proteasome inhibitor PI31 subunit	Q5XIU5	0.01%	
Proteasome subunit alpha type	Q6P9V5	0.01%	
Protein AMBP	Q64240	0.01%	0.01%
Protein Ankhd1	E9PTK9	0.01%	0.01%
Protein Asap2	A0A0G2K808		0.01%
Protein Catsper3	F1LZS9	0.01%	
Protein Ccar1	D4A2P1	0.00%	0.00%
Protein Ccdc166	M0R4R5	0.01%	
Protein Ccdc83	D4A891	0.01%	0.01%
Protein Cfh	G3V9R2	0.01%	
Protein Diras2	D3ZHX3	0.02%	
Protein disulfide-isomerase A6	Q63081		0.01%
Protein Eef2kmt	D3Z8P8	0.01%	0.01%
Protein Eml6	D3ZQR6	0.00%	
Protein Epb4.1	D3ZIP3	0.01%	0.01%
Protein Ercc6l	D4A0G9	0.01%	0.01%
Protein Fcgbp	D3ZJF8	0.00%	0.01%
Protein Fer1l4	D4ABP2	0.01%	0.00%
Protein Fhad1	A0A140UHW9	0.01%	
Protein Gltpd2	E9PTH4	0.01%	
Protein Gm9999	A0A0G2K5W0		0.06%
Protein Hba-a2	A0A0G2JSV6	11.89%	13.36%
Protein Hbb-b1	Q62669	14.83%	16.67%
Protein Hbq1	D4A021	0.03%	
Protein Igdcc3	D3ZQ86	0.01%	0.01%
Protein Ighm	A0A0G2K9Y0	0.04%	
Protein Ino80	D4A6Q6	0.01%	
Protein Kif13b	A0A0G2K8Z9	0.01%	
Protein kinase C	F1LS98		0.01%
Protein kinase C alpha type	P05696	0.00%	
Protein Klhl34	D3ZY10	0.00%	0.01%
Protein Kng2	A0A0G2KAY3	0.04%	0.03%
Protein LOC100912445	A0A0H2UHK5		0.00%
Protein LOC100912866	F7F730		0.02%
Protein LOC297568	A0A0G2K926	0.11%	0.15%
Protein Lpin1	A0A0G2JW03	0.00%	
Protein Lrrn4	F1LTX4		0.00%
Protein Map3k2	F1M9D0	0.01%	0.01%
Protein Map4k4	A0A0G2K7W4	0.01%	

Protein Mast4	M0R3L1		0.01%
Protein Mst1r	D3ZYM4	0.01%	
Protein Myh1	F1LMU0	0.28%	0.12%
Protein Rad23a	Q5XFX7		0.01%
Protein RGD1310507	A0A0G2K896	0.02%	0.01%
Protein RGD1563692	B1WC80		0.01%
Protein RGD1565679	A0A0G2K8K4	0.02%	0.02%
Protein Rrp1b	D3ZY39	0.00%	
Protein S100-A8	P50115	0.10%	
Protein S100-A9	P50116	0.09%	
Protein Serpinc1	Q5M7T5	0.02%	0.01%
Protein Setd2	A0A0G2KB10		0.00%
Protein Sf3b1	G3V7T6	0.00%	0.00%
Protein Sh3pxd2a	A0A0G2JX92	0.01%	0.01%
Protein Shroom1	M0RB44	0.00%	
Protein Sptb	A0A140UHX6	0.04%	
Protein Stom	Q5XI04		0.02%
Protein Stxbp4	A0A0G2JXI5	0.01%	
Protein Tln1	G3V852	0.01%	
Protein Txlna	B2GV14		0.01%
Protein Tyrp1	D3ZH71	0.01%	0.01%
Protein Usp47	F1MAA1	0.01%	0.01%
Protein Vom1r19	Q5J3E2	0.01%	
Protein Wnt	G3V819	0.01%	
Protein Wrn	F1LTH9	0.01%	
Protein Zfp512b	D3ZJ29	0.00%	
Protein Zranb3	D3ZDS8	0.01%	0.01%
Prothrombin	G3V843	0.01%	0.01%
Pyruvate kinase PKM	P11980	0.01%	
RAB10, member RAS oncogene family	Q5RKJ9	0.02%	
Ras-related protein Rab-9A	Q99P75	0.01%	0.03%
Ras-related protein Rap-1A	P62836	0.04%	
Rat hemoglobin beta-chain (Fragment)	Q63223	1.23%	
Receptor expression-enhancing protein 5	B2RZ37		0.03%
Rho GDP-dissociation inhibitor 1	Q5XI73	0.02%	
Rho-associated protein kinase	Q5U300	0.00%	0.01%
Serine protease inhibitor A3K	P05545	0.01%	0.02%
Seroansferrin	P12346	0.08%	0.11%
Serum albumin	P02770	2.21%	1.85%
Serum amyloid A protein	Q5M878		0.03%
Serum amyloid P-component	P23680	0.01%	
Serum paraoxonase/arylesterase 1	P55159	0.01%	0.01%

SH2 domain-containing protein 4A	Q6AYC8		0.01%
Sodium- and chloride-dependent glycine transporter 1	P28572	0.01%	0.01%
Spermatid perinuclear RNA binding protein, isoform CRA_b	A0A0G2K3L7	0.01%	0.01%
Spermatid perinuclear RNA-binding protein	Q9JKU6	0.00%	
Sulfotransferase	D3ZGJ6		0.01%
Superoxide dismutase [Cu-Zn]	Q6LDS4	0.08%	
Syntaxin 1A	Q9QXG3	0.01%	
Syntaxin binding protein 2, isoform CRA_b	G3V637	0.01%	
Thioredoxin	P11232	0.04%	0.05%
T-kininogen 1	P01048	0.04%	
Translationally-controlled tumor protein	P63029		0.03%
Transmembrane protein 196	A0A0G2JZN9		0.02%
Transmembrane protein 232	A0A0H2UHU7		0.01%
Transthyretin	P02767	0.16%	0.15%
Triosesphosphate isomerase	A0A0G2JWJ4	0.03%	
tRNA methyltransferase 10 homolog A	A0A0G2K1N0	0.02%	0.04%
Tropomyosin beta chain	P58775	0.04%	
Tyrosine-protein kinase	Q501W1	0.01%	
Tyrosine-protein kinase	Q501W1		0.01%
Ubiquitin-conjugating enzyme E2 N	Q9EQX9		0.02%
UDP-glucuronosyltransferase	D4A132	0.01%	0.01%
Vacuolar protein sorting-associated protein 52 homolog	O55166		0.01%

Table S3. List of all detected proteins in the hard corona of HA and MHA scaffolds at 1 h implantation.

Protiens	**Uniprot access ID**	**Content (%)**	
		HA	**MHA**
14-3-3 protein zeta/delta	A0A0G2JV65	0.02%	
2,3-bisphosphoglycerate mutase	Q6P6G4	0.03%	0.08%
Aa2-028	Q7TMC3	0.01%	0.01%
Ac1873	Q7TQ70		0.02%
Actin, alpha skeletal muscle	P68136	0.23%	0.32%
Actin, cytoplasmic 1	P60711		0.26%
Actin, cytoplasmic 2	V9GZ85	0.17%	
Actinin alpha 3, isoform CRA_a	Q8R4I6		0.02%
Actin-related protein 2/3 complex	B2RZ72		0.03%

subunit 4			
Acyl-coenzyme A amino acid N-acyltransferase 2	Q5FVR5		0.01%
Adenylate kinase isoenzyme 1	P39069	0.03%	
Adiponectin receptor 1	Q6P746		0.02%
Adiponectin receptor 1, isoform CRA_a	G3V6I6	0.02%	
ADP/ATP translocase 1	Q6P9Y4	0.02%	0.06%
ADP-ribosylation factor 5	P84083	0.02%	
Afamin	G3V9R9	0.01%	0.04%
Agtpbp1 protein (Fragment)	B0BN26		0.01%
Alpha globin	Q63910	0.83%	0.81%
Alpha-1,4 glucan phosphorylase	G3V8V9	0.06%	0.07%
Alpha-1-antiproteinase	A0A0G2JY31	0.13%	0.22%
Alpha-1B-glycoprotein	Q9EPH1	0.10%	0.11%
Alpha-1-macroglobulin	Q63041	0.17%	0.16%
Alpha-2-HS-glycoprotein	P24090	0.06%	0.13%
Alpha-enolase	Q5BJ93	0.05%	
Anion exchange protein	Q5U329	0.15%	0.13%
Anionic trypsin-1	P00762	0.18%	0.27%
Ankyrin 1, erythroid	D3Z9Z0	0.02%	0.04%
AP complex subunit beta	D4AD35	0.01%	0.01%
AP-3 complex subunit mu-1	Q6IRG9	0.02%	0.02%
Apolipoprotein A-I	P04639	0.28%	0.27%
Apolipoprotein A-II	P04638	0.05%	
Apolipoprotein A-IV	P02651	0.06%	0.09%
Apolipoprotein B-100	F1M6Z1		0.00%
Apolipoprotein C-II (Predicted)	G3V8D4	0.04%	
Apolipoprotein E	A0A0G2K151		0.10%
Apolipoprotein H	Q5I0M1		0.02%
Apolipoprotein M	P14630	0.05%	
Aquaporin-1	A0A0G2K3E0	0.04%	0.03%
Argininosuccinate synthase	P09034		0.01%
Arylsulfatase E	Q32KK0		0.01%
ATP synthase subunit alpha, mitochondrial	P15999		0.06%
ATP synthase subunit beta	G3V6D3		0.04%
ATP synthase subunit beta, mitochondrial	P10719	0.02%	
ATP/GTP binding protein 1 (Predicted), isoform CRA_a	G3V8G1	0.00%	
ATP-binding cassette sub-family A member 17	E9PU17	0.00%	
ATP-dependent RNA helicase DDX25	Q68G14		0.01%

Beta-2-glycoprotein 1	P26644	0.02%	
Beta-enolase	P15429	0.11%	0.20%
Beta-glo	Q6PDU6	4.65%	5.81%
Beta-globin chain	Q63067	0.02%	0.05%
Biliverdin reductase B (Flavin reductase (NADPH))	B5DF65	0.04%	0.07%
BTB (POZ) domain containing 4 (Predicted)	D3ZTY1	0.01%	
C9 protein	Q5BKC4	0.02%	
Cadherin-related neuronal receptor c2	Q767H7		0.01%
Caldesmon 1, isoform CRA_b	G3V9E3	0.01%	
cAMP-dependent protein kinase catalytic subunit beta	P68182	0.02%	
Carbonic anhydrase 1	B0BNN3	0.16%	0.27%
Carbonic anhydrase 2	P27139	0.14%	0.11%
Carbonic anhydrase 3	P14141	0.05%	0.02%
Carboxylic ester hydrolase	D3ZGK7	0.01%	0.03%
Catalase	P04762	0.04%	0.09%
Cathepsin G	G3V9Q7		0.02%
Cationic amino acid transporter 2	B5D5N9		0.02%
Cationic amino acid transporter-2	Q4PLF2	0.00%	
Cd72 molecule	Q5BK59	0.01%	0.01%
Ceruloplasmin	P13635	0.06%	0.08%
Clusterin	Q6P7S6		0.02%
Coagulation factor XIII A chain	O08619		0.01%
Coiled-coil domain-containing protein 60	Q3ZAV0		0.01%
Collagen alpha-1(I) chain	P02454	0.01%	0.02%
Collagen alpha-2(I) chain	P02466	0.02%	0.01%
Complement C3	M0RBJ7	0.18%	0.19%
Complement C4	M0RB00		0.01%
Complement C4 (Fragment)	P08649	0.01%	
Complement factor I	A0A0G2K135		0.01%
Complement inhibitory factor H	Q91YB6	0.01%	0.01%
Corticosteroid-binding globulin	P31211	0.08%	0.07%
Creatine kinase M-type	A0A0G2JSP8	0.04%	0.27%
Cul1 protein	B1WBY1		0.01%
Cyclic AMP-responsive element-binding protein 3-like protein 2	Q6QDP7		0.01%
Cytochrome c oxidase subunit 2	Q5UAJ6	0.02%	
Cytochrome c oxidase subunit 5A, mitochondrial	P11240		0.04%
Dermcidin	Q71DI1	0.09%	0.11%

Dual specificity mitogen-activated protein kinase kinase 5	Q62862	0.02%	
Dual specificity mitogen-activated protein kinase kinase 5	Q62862		0.02%
Enolase 1, (Alpha)	Q5EB49		0.09%
Epsilon 1 globin	O88752	2.20%	1.75%
Erythrocyte protein band 4.2	B5DF57	0.01%	
Erythrocyte protein band 4.2	B5DF57		0.05%
Erythroid spectrin beta	Q6XDA0		0.04%
Eukaryotic translation initiation factor 5A-1	Q3T1J1	0.02%	
Exostoses (Multiple) 2 (Predicted)	E9PTT2	0.00%	
Ext2 protein	B2RYE4		0.01%
Fetub protein	Q6IRS6	0.05%	
Fetuin-B	Q9QX79		0.05%
Fibrinogen beta chain	P14480		0.01%
Fibroblast growth factor 10	P70492		0.02%
Fructose-bisphosphate aldolase A	P05065	0.11%	0.14%
Galectin-5	P47967	0.06%	0.09%
Gelsolin	Q68FP1	0.02%	0.04%
Gltpd2 protein	B0BNN1	0.02%	0.02%
Glutathione peroxidase	Q6PDW8	0.07%	0.04%
Glyceraldehyde-3-phohate dehydrogenase	M0R660	0.29%	0.17%
Group specific component	Q68FY4	0.04%	
Guanine deaminase	Q9JKB7	0.02%	0.05%
Gypsy retrotransposon integrase-like protein 1	Q66H30	0.01%	0.01%
Haptoglobin	P06866	0.04%	0.03%
HAUS augmin-like complex subunit 1	Q9R0A8		0.02%
Heat shock cognate 71 kDa protein	P63018	0.02%	
Hemoglobin alpha, adult chain 2	B1H216		8.80%
Hemoglobin subunit alpha-1/2	P01946	8.76%	
Hemoglobin subunit beta-1	P02091	29.23%	27.44%
Hemoglobin subunit beta-2	P11517	11.93%	11.26%
Hemopexin	P20059	0.21%	0.31%
Histidine-rich glycoprotein	Q99PS8	0.01%	0.05%
Histone H2A	Q6I8Q6	0.22%	0.13%
Histone H2B	D4A817	0.22%	0.16%
Histone H3	D3ZK97	0.13%	
Histone H4	P62804	0.28%	0.12%
Ig gamma-2B chain C region	P20761	0.09%	0.11%
Ig lambda-2 chain C region	P20767	0.09%	0.07%

Igh-6 protein	Q569B3		0.04%
Inter alpha-trypsin inhibitor, heavy chain 4	Q5EBC0	0.08%	0.13%
Inter-alpha trypsin inhibitor, heavy chain 1 (Predicted), isoform CRA_a	B2RYM3		0.01%
Inter-alpha-trypsin inhibitor heavy chain H3	D3ZBS2	0.01%	0.01%
Intraflagellar transport 74 homolog (Chlamydomonas)	Q5XIR2		0.01%
Kaptin (Actin binding protein) (Predicted), isoform CRA_a	B2RYG4	0.02%	0.01%
Kinesin 13B	Q70AM4		0.00%
Kininogen	Q6LE95	0.13%	
Kininogen 1	Q5PQU1	0.08%	0.28%
Klotho	Q9Z2Y9	0.01%	
Leucine zipper putative tumor suppressor 3	Q8K1Q4	0.01%	0.01%
Leucyl-cystinyl aminopeptidase	P97629	0.01%	
Leukemia inhibitory factor receptor	G3V7K2	0.01%	0.01%
Leukocyte surface antigen CD47	A0A0G2JTH4	0.01%	
Lipase	D4AA61	0.01%	
L-lactate dehydrogenase	B5DEN4	0.09%	
L-lactate dehydrogenase A chain	P04642		0.11%
LOC311026 protein (Fragment)	Q4QQU4	0.02%	
LOC361985 protein	Q4KMA3	0.02%	
LOC367586 protein	Q5M7V3	0.09%	0.15%
LOC500183 protein	Q4KM66	0.09%	
Long-chain-fatty-acid--CoA ligase 3	Q63151		0.01%
Low molecular weight phosphotyrosine protein phosphatase	P41498	0.02%	0.04%
Lrrc43 protein (Fragment)	Q5XHZ4		0.01%
LRRGT00161	Q6QI47		0.04%
Lys-63-specific deubiquitinase BRCC36	B2RYM5	0.02%	0.01%
Malate dehydrogenase, cytoplasmic	O88989		0.01%
Matrix metalloproteinase 19	C0M4B0		0.01%
Mediator of RNA polymerase II transcription subunit 23	A0A0H2UHV2	0.01%	0.00%
Meiosis-specific nuclear structural protein 1	Q6AXQ8	0.01%	0.01%
Microtubule-associated protein 10	D3ZAP3	0.01%	
Mitochondrial ribosomal protein L4 (Predicted), isoform CRA_b	D4A131	0.02%	

Mitogen-activated protein kinase	Q62862		0.01%
Mucin-4	Q63661	0.00%	0.01%
Multidrug resistance-associated protein 6	O88269	0.01%	
Murinoglobulin-2	M0R5V7		0.13%
Myogenin	O70425		0.02%
Myoglobin	Q9QZ76	0.06%	0.16%
Myosin binding protein C, fast-type (Predicted)	D3ZA38	0.00%	
Myosin light chain 1/3, skeletal muscle isoform	P02600	0.19%	0.18%
Myosin light chain 3	P16409	0.05%	0.03%
Myosin regulatory light chain 2, skeletal muscle isoform	P04466	0.15%	0.20%
Myosin-7	P02564	0.04%	0.05%
Myosin-9	Q62812		0.01%
NEFA-interacting nuclear protein NIP30	Q6AY90	0.02%	
NS5ATP4	Q6QN15		0.02%
Nucleoprotein TPR	F1MA98	0.01%	0.01%
Olfactory receptor	F1LUC6	0.05%	0.06%
Oxysterol-binding protein	A0A0G2K327		0.01%
p55 protein	Q5BK33	0.05%	0.02%
Parvalbumin alpha	P02625		0.09%
Pentaxin	H6X2W1	0.07%	0.05%
Peptidyl-prolyl cis-trans isomerase	A0A0G2K2E4	0.02%	0.02%
Peroxiredoxin-2	P35704	0.29%	0.21%
Phosphodiesterase	Q76KC5	0.01%	0.01%
Phosphoglycerate kinase 1	P16617	0.01%	0.02%
Phosphoglycerate mutase 2	P16290	0.07%	0.08%
Phosphopantothenoylcysteine decarboxylase (Predicted), isoform CRA_a	D3ZZZ5	0.03%	0.03%
Phytanoyl-CoA hydroxylase-interacting protein-like	Q6AYN4	0.01%	0.01%
Plasminogen	Q01177	0.02%	0.03%
Platelet factor 4	P06765	0.05%	
Poly [ADP-ribose] polymerase	D3Z8Q6		0.01%
Polymerase (DNA directed), eta (RAD 30 related) (Predicted)	D4ADZ0	0.01%	0.01%
Potassium voltage-gated channel subfamily H member 5	Q9EPI9	0.00%	
Profilin-1	P62963	0.04%	

Proteasome subunit beta type	G3V7Q6	0.02%	
Protein Actn2	D3ZCV0	0.01%	
Protein AMBP	Q64240		0.03%
Protein Ankhd1	E9PTK9	0.01%	0.01%
Protein C2	A0A0U1RRP9		0.01%
Protein Ccar1	D4A2P1	0.01%	
Protein Ccar1	D4A2P1		0.01%
Protein Col6a6	D3ZL10		0.01%
Protein Dgat2l6	A0A096MJA4	0.02%	
Protein Diras2	D3ZHX3	0.04%	0.02%
Protein Dnah2	A0A0G2JYL5		0.01%
Protein Dsp	F1LMV6		0.01%
Protein Eef2kmt	D3Z8P8	0.02%	0.01%
Protein Epb4.1	D3ZIP3	0.01%	0.02%
Protein Ercc6l	D4A0G9	0.01%	0.00%
Protein Fcgbp	D3ZJF8	0.34%	0.00%
Protein Fer1l4	D4ABP2		0.01%
Protein Fhad1	A0A140UHW9	0.01%	0.01%
Protein Frmd4a	D3ZU85	0.01%	
Protein Gm8444	F1M6G3		0.03%
Protein Hba-a2	A0A0G2JSV6	12.16%	12.07%
Protein Hbb-b1	Q62669	15.10%	14.29%
Protein Hydin	A0A0G2JXD6	0.00%	
Protein Igdcc3	D3ZQ86	0.01%	0.01%
Protein Ighm	A0A0G2K9Y0	0.09%	0.10%
Protein Igkv1-88	M0RDL2		0.05%
Protein Igkv5-48	F1M663		0.04%
Protein Igkv6-20	F1M229		0.13%
Protein Kif13b	A0A0G2K8Z9	0.01%	
Protein Kif21a	D3ZYN2	0.00%	
Protein Kif21a	D3ZYN2		0.00%
Protein kinase C alpha type	P05696		0.01%
Protein Klhl34	D3ZY10		0.01%
Protein Kng2	A0A0G2KAY3	0.05%	0.06%
Protein Lmntd2	B1WC94	0.01%	0.01%
Protein LOC103690878	D3ZUH2	0.02%	
Protein LOC297568	A0A0G2K926	0.23%	0.39%
Protein Mast4	M0R3L1		0.00%
Protein Mbd5	E9PTQ5		0.00%
Protein Mut	D3ZKG1	0.00%	
Protein Myh1	F1LMU0	0.15%	0.21%
Protein NEWGENE_1565481	A0A0G2K6D0	0.00%	
Protein pelota homolog	Q5XIP1		0.01%

Protein Pfpl	A0A0G2JUC0		0.01%
Protein phosphatase methylesterase 1	R9PXV9	0.02%	0.01%
Protein Poc1a	D4ABU4		0.02%
Protein Rad23a	Q5XFX7		0.02%
Protein Rbsn	D3ZL11		0.01%
Protein RGD1304963	D3ZS67		0.00%
Protein RGD1310507	A0A0G2K896	0.02%	
Protein RGD1563692	B1WC80	0.01%	
Protein RGD1565679	A0A0G2K8K4	0.02%	
Protein Rltpr	D3ZC15		0.00%
Protein Rundc1	F1LVT5	0.01%	
Protein S100-A8	P50115	0.04%	
Protein S100-A9	P50116	0.09%	0.08%
Protein Sema3f	D3ZGX9	0.01%	0.01%
Protein Serpina3c	A0A0G2JSK1	0.03%	
Protein Serpinc1	Q5M7T5	0.04%	0.06%
Protein Sf3b1	G3V7T6	0.00%	
Protein Sh3pxd2a	A0A0G2JX92		0.00%
Protein Shroom4	F1LVL5		0.00%
Protein Spta1	D4A678	0.03%	0.06%
Protein Ssna1	B2RZ20	0.06%	
Protein Stom	Q5XI04	0.01%	
Protein Tyrp1	D3ZH71	0.01%	
Protein Tyrp1	D3ZH71		0.01%
Protein unc-119 homolog A	Q62885		0.02%
Protein Usp47	F1MAA1	0.01%	
Protein Wrn	F1LTH9	0.00%	
Protein Zfp516	D4A239	0.01%	0.01%
Protein Zranb3	D3ZDS8	0.01%	0.01%
Prothrombin	G3V843	0.01%	0.01%
Pyruvate kinase PKM	P11980	0.06%	0.07%
Rat apolipoprotein E protein	Q65ZS7	0.15%	
Rat hemoglobin beta-chain (Fragment)	Q63223	1.60%	1.31%
Rat T-kininogen (T-KG)	Q63581		0.05%
RCG21066	D3ZJW6	0.08%	
Rho-associated protein kinase	Q5U300	0.00%	0.00%
Sarcoplasmic/endoplasmic reticulum calcium ATPase 1	Q64578	0.01%	0.03%
Sept9 protein (Fragment)	B2GVB4		0.01%
Serine protease inhibitor A3K	P05545		0.14%
Serine protease inhibitor A3L	P05544	0.09%	0.12%
Serotransferrin	P12346	0.35%	0.47%
Serum albumin	P02770	3.79%	4.54%

Serum paraoxonase/arylesterase 1	P55159	0.04%	0.02%
SH3 domain-containing kinase-binding protein 1	M0RBZ7	0.00%	
Slit homolog 3 protein	O88280	0.00%	
Sodium- and chloride-dependent glycine transporter 1	P28572	0.01%	0.01%
Spastin	A0A0G2K590		0.01%
Spermatid perinuclear RNA-binding protein	A0A0G2JV89		0.01%
Sulfate anion transporter 1	P45380		0.01%
Sulfoansferase	D3ZGJ6	0.02%	
Superoxide dismutase [Cu-Zn]	Q6LDS4	0.09%	0.07%
Thioredoxin	P11232	0.05%	0.07%
Thioredoxin-like protein 1	Q920J4		0.02%
T-kininogen 1	P01048		0.07%
Transmembrane protein 196	A0A0G2JZN9		0.03%
Transthyretin	P02767	0.15%	0.19%
Triosephosphate isomerase	P48500		0.07%
tRNA methyltransferase 10 homolog A	A0A0G2K1N0	0.05%	0.04%
Tropomyosin 1, alpha, isoform CRA_i	A0A0G2JX64		0.06%
Tuberin	A0A0G2JSL4	0.00%	
Tyrosine-protein kinase	Q501W1	0.02%	
Ubiquitin thioesterase OTUB1	B2RYG6	0.02%	
Ubiquitin-60S ribosomal protein L40	P62986		0.07%
UDP-glucuronosyltransferase	D4A132		0.01%
Vacuolar protein sorting 33 homolog A (S. cerevisiae)	Q3KRF0	0.01%	
Vitamin D3 receptor	P13053	0.01%	
Vitamin D-binding protein	P04276		0.10%

Table S4. List of all detected proteins in the hard corona of HA and MHA scaffolds at 24 h implantation.

Protiens	**Uniprot access ID**	**Content (%)**	
		HA	**MHA**
5-hydroxytryptamine receptor 2B	F1LWG8		0.03%
60 kDa heat shock protein, mitochondrial	P63039		0.01%
6-phosphogluconate dehydrogenase, decarboxylating	Q7TP11		0.03%
78 kDa glucose-regulated protein	P06761		0.03%
Aa1018	Q7TQ11		0.08%
Aa2-028	Q7TMC3	0.02%	0.04%

Aartate aminotransferase, cytoplasmic	P13221		0.01%
Ab2-098	Q7TP58		0.02%
Ac1873	Q7TQ70		0.13%
Actin, alpha cardiac muscle 1	P68035	0.28%	
Actin, alpha skeletal muscle	P68136		0.78%
Actin, cytoplasmic 1	P60711		0.75%
Actin, cytoplasmic 2	P63259	0.34%	
Actinin alpha 3, isoform CRA_a	Q8R4I6		0.02%
Actin-related protein 2	Q5M7U6	0.06%	
Actin-related protein 2/3 complex subunit 4	B2RZ72		0.06%
Actin-related protein 2/3 complex subunit 5	A0A0G2K585		0.05%
Actin-related protein 23 complex subunit 4	B2RZ72	0.03%	
Acyl-coenzyme A amino acid N-acylansferase 2	A0A0G2JV92		0.01%
Adenosine deaminase domain-containing protein 1	Q3KR54		0.01%
Adiponectin receptor 1, isoform CRA_a	G3V6I6	0.03%	
ADP/ATP translocase 1	Q6P9Y4	0.04%	
ADP/ATP translocase 2	Q09073		0.03%
Afamin	P36953		0.08%
Afm protein (Fragment)	Q5BJP7	0.03%	
Aldehyde oxidase 2	A0A096P6M6		0.01%
Alpha 2 macroglobulin cardiac isoform (Fragment)	Q5D178		0.04%
Alpha globin	Q63910	0.80%	0.54%
Alpha-1,4 glucan phosphorylase	G3V8V3		0.02%
Alpha-1-acid glycoprotein	P02764	0.06%	0.26%
Alpha-1-antiproteinase	P17475	0.26%	0.47%
Alpha-1B-glycoprotein	Q9EPH	0.10%	0.22%
Alpha-1-inhibitor 3	P14046		0.13%
Alpha-1-macroglobulin	Q63041	0.12%	0.22%
Alpha-2 antiplasmin	Q80ZA3		0.03%
Alpha-2-HS-glycoprotein	P24090	0.28%	0.24%
Alpha-2-macroglobulin	P06238	0.02%	0.19%
Alpha-actinin-1	Q9Z1P2	0.01%	
Alpha-enolase	P04764	0.04%	0.12%
Alpha-tropomyosin 3	Q63607	0.05%	
Anion exchange protein	F8WFT7		0.10%

Anionic trypsin-1	P00762	0.27%	0.29%
Ankyrin 1, erythroid	D3Z9Z0	0.01%	0.01%
Ankyrin repeat domain 5 (Predicted)	D4A9E7	0.01%	
Annexin	Q8VIN2	0.03%	0.04%
Annexin A1	P07150	0.25%	0.40%
Annexin A2	Q07936	0.08%	0.08%
AP complex subunit beta	D4AD35	0.02%	0.01%
AP-3 complex subunit mu-2	P53678	0.02%	0.01%
Apolipoprotein A-I	P04639	0.28%	0.47%
Apolipoprotein A-II	P04638		0.04%
Apolipoprotein A-IV	P02651	0.05%	0.15%
Apolipoprotein C-II (Predicted)	G3V8D4		0.07%
Apolipoprotein H	Q5I0M1	0.03%	0.06%
Apolipoprotein M	P14630	0.06%	0.05%
Aquaporin-1	P29975	0.01%	0.04%
Argininosuccinate synthase	P09034		0.02%
Aspartate aminoansferase, mitochondrial	P00507	0.04%	
ATP synthase subunit alpha	F1LP05		0.13%
ATP synthase subunit alpha, mitochondrial	P15999	0.07%	
ATP synthase subunit beta, mitochondrial	G3V6D3	0.07%	0.14%
ATP/GTP binding protein 1 (Predicted), isoform CRA_a	G3V8G1	0.01%	
ATP-binding cassette sub-family A member 17	E9PU17		0.01%
Axin-2	O70240	0.01%	
Band 3 anion transport protein	P23562	0.09%	
Beta-2-microglobulin	P26644		0.03%
Beta-enolase	P15429	0.02%	0.10%
Beta-glo	Q6PDU6		3.23%
B-factor, properdin	Q6MG74		0.05%
Biliverdin reductase B (Flavin reductase (NADPH))	B5DF65	0.09%	0.07%
BMP/retinoic acid-inducible neural-specific protein 1	Q925T8		0.01%
Cadherin-related neuronal receptor c2	Q767H7		0.01%
Calcium-transporting ATPase	B4F7E5	0.03%	0.01%
Calcium-transporting ATPase type 2C member 2	Q8R4C1	0.01%	
Calreticulin	P18418		0.04%
cAMP-dependent protein kinase	P68182		0.05%

catalytic subunit beta			
Carbamoyl-phosphate synthase [ammonia], mitochondrial	P07756		0.01%
Carbonic anhydrase 1	B0BNN3	0.18%	0.19%
Carbonic anhydrase 2	P27139	0.18%	0.13%
Carboxypeptidase B2	Q9EQV9		0.01%
Catalase	P04762	0.05%	0.09%
Cathepsin G	G3V9Q7	0.13%	0.22%
Cationic amino acid transporter 2	B5D5N9	0.02%	0.02%
Cd72 molecule	Q5BK59	0.02%	0.03%
Ceruloplasmin	G3V7K3	0.08%	0.13%
Clathrin heavy chain	F1M779	0.01%	0.01%
Clusterin	A0A0G2KB42	0.06%	0.06%
Coagulation factor XII	D3ZTE0		0.02%
Coagulation factor XIII A chain	G3V811		0.01%
Coatomer subunit beta	P23514	0.01%	
Cofilin-1	P45592	0.02%	
Coiled-coil and C2 domain-containing protein 1B	Q5FVK6	0.01%	
Coiled-coil domain-containing protein 60	A0A140TAG2	0.01%	0.01%
Collagen alpha-1(I) chain	P02454	0.01%	0.02%
COMM domain-containing protein 3	Q6P9U3		0.02%
Complement C3	M0RBJ7	0.19%	0.39%
Complement C4	P08649		0.03%
Complement component 8, gamma polypeptide (Predicted), isoform CRA_a	D3ZPI8	0.05%	0.06%
Complement component C8 beta chain	P55314	0.01%	0.01%
Complement component C9	F7F389	0.02%	0.08%
Complement factor I	A0A0G2K135	0.01%	0.01%
Copine 3 protein	D3ZLA3		0.01%
Coronin-1A	Q91ZN1	0.01%	0.04%
Corticosteroid-binding globulin	P31211	0.04%	0.10%
CRAMP (Fragment)	Q71KM5	0.09%	0.10%
Creatine kinase M-type	A0A0G2JSP8	0.04%	0.13%
Cul1 protein	B1WBY1		0.01%
Cullin-associated NEDD8-dissociated protein 1	P97536	0.00%	
Cytochrome c oxidase subunit 2	Q8SEZ5		0.07%
Cytochrome c oxidase subunit 4 isoform 1, mitochondrial	P10888	0.05%	
Cytochrome c oxidase subunit 5A,	P11240	0.10%	0.17%

mitochondrial			
Cytoplasmic dynein 2 heavy chain 1	Q9JJ79	0.01%	
Deoxyhypusine hydroxylase	Q5PPJ4		0.01%
Dermcidin	Q71DI1	0.10%	0.17%
Distal-less homeobox 5, isoform CRA_a	A0A0G2JSK6	0.02%	
Dual specificity mitogen-activated protein kinase kinase 5	Q62862	0.02%	0.02%
Dystrobrevin	A0A0G2JVM6	0.01%	
E3 ubiquitin-protein ligase UBR5	Q62671		0.01%
Elastase 2, neutrophil (Predicted)	D4A488	0.01%	0.02%
Elongation factor 1-alpha	M0R757		0.05%
Elongation factor 1-alpha 1	P62630	0.02%	
Endoplasmin	A0A0A0MY09		0.01%
Epsilon 1 globin	O88752	2.08%	1.94%
Erythrocyte protein band 4.2	B5DF57	0.01%	0.01%
Erythroid spectrin beta	Q6XDA0	0.02%	
Exostoses (Multiple) 2 (Predicted)	E9PTT2		0.01%
Fas ligand (TNF superfamily, member 6)	A0A0U5J7X8	0.02%	
Fbxo21 protein	B0BNL1		0.01%
Ferritin	M0R597	0.03%	
Ferritin (Fragment)	Q6P9V2		0.04%
Fetuin-B	Q9QX79	0.08%	0.16%
Fga protein	A1L114	0.06%	
Fibrinogen beta chain	P14480	0.24%	0.27%
Fibrinogen gamma chain	P02680	0.09%	0.08%
Fibronectin	A0A096P6L8	0.03%	0.05%
Filamin alpha	C0JPT7		0.01%
Fructose-bisphohate aldolase	Q6AY07		0.06%
Fructose-bisphohate aldolase A	P05065	0.05%	
Galectin-5	P47967	0.08%	0.13%
Gamma-adducin	A0A0G2JW2		0.01%
Gelsolin	Q68FP1	0.04%	0.05%
Gltpd2 protein	B0BNN1		0.03%
Glucose-6-phohate isomerase	Q6P6V0		0.04%
Glucose-6-phosphate 1-dehydrogenase	P05370	0.01%	0.01%
Glutathione peroxidase	A0A0G2K531	0.06%	0.09%
Glyceraldehyde-3-phosphate dehydrogenase	M0R590	0.10%	0.21%
Glyceraldehyde-3-phosphate dehydrogenase, testis-ecific	Q9ESV6	0.03%	
Group specific component	Q68FY4		0.14%

GTPase activating protein testicular GAP1	Q5Y9B8		0.00%
Guanine deaminase	Q9JKB7	0.06%	0.05%
Guanine nucleotide-binding protein G(i) subunit alpha-1	P10824	0.02%	
Gypsy retrotransposon integrase-like protein 1	Q66H30	0.01%	0.02%
Haptoglobin	A0A0G2JSH5	0.15%	0.27%
Heat shock cognate 71 kDa protein	P63018	0.02%	0.10%
Heat shock protein HSP 90-beta	P34058		0.02%
Hemoglobin subunit alpha-1/2	P01946	7.77%	6.94%
Hemoglobin subunit beta-1	A0A0G2JSW3	27.40%	17.39%
Hemoglobin subunit beta-2	P11517	11.00%	8.90%
Hemopexin	P20059	0.42%	0.90%
Heparin cofactor 2	Q64268		0.02%
Histidine-rich glycoprotein	A0A0G2K3G0	0.04%	0.09%
Histone H2A	D3ZXP3	0.60%	1.30%
Histone H2B	D3ZNH4	0.48%	
Histone H2B type 1	Q00715		0.37%
Histone H3	D3ZJ08	0.42%	0.23%
Histone H4	P62804	0.97%	1.08%
Histone methyltransferase Pr-set7Set8	D3ZEB9	0.01%	
Ig gamma-2B chain C region	P20761	0.09%	0.27%
Ig lambda-2 chain C region	P20767	0.04%	0.17%
Igh-6 protein	Q569B8	0.03%	0.05%
Integrin beta	B2RYB8		0.01%
Inter alpha-trypsin inhibitor, heavy chain 4	Q5EBC0	0.10%	0.22%
Inter-alpha-trypsin inhibitor heavy chain H3	Q63416	0.02%	0.03%
Intraflagellar transport 74 homolog (Chlamydomonas)	Q5XIR2		0.01%
Isocitrate dehydrogenase [NADP] cytoplasmic	P41562		0.02%
Jouberin	F1M9F9		0.01%
Kallistatin	P97569		0.04%
Kinesin-like protein KIF27	Q7M6Z5		0.01%
Kininogen	Q6LE95	0.36%	0.63%
Kng2 protein	Q5M8A0	0.04%	0.13%
Lamin-B receptor	O08984		0.01%
Lamin-B1	P70615		0.01%
Leucine-rich repeat and IQ domain-containing protein 3	Q6AYL8	0.01%	

Leukemia inhibitory factor receptor	G3V7K2		0.01%
Leukocyte elastase inhibitor A	Q4G075	0.02%	0.08%
Leukocyte surface antigen CD47	A0A0G2JTH4	0.03%	0.05%
Leukotriene A(4) hydrolase	Q499P2		0.02%
L-lactate dehydrogenase	P41562		0.04%
LOC367586 protein	Q5M7V3	0.22%	0.22%
LOC500183 protein	Q4KM66	0.10%	0.21%
LOC683667 protein	B0BNJ1	0.03%	0.10%
Long-chain-fatty-acid--CoA ligase 3	Q63151		0.01%
Lysozyme C-1	P00697		0.06%
Maix metalloproteinase-9	A0A0G2JUD9		0.01%
Malate dehydrogenase (Fragment)	Q0QF43	0.03%	0.05%
Meiosis-specific nuclear structural protein 1	Q6AXQ8	0.01%	
Metaboopic glutamate receptor 4	F1LXP2	0.00%	
Microtubule-associated protein	A0A0U1RRQ0	0.01%	
Mitochondrial ribosomal protein L4 (Predicted), isoform CRA_b	D4A131		0.03%
Moesin	A0A096MK30		0.02%
Mucin-4	Q63661	0.01%	0.01%
Multidrug resistance-associated protein 6	O88269	0.01%	0.01%
Murinoglobulin-1	Q03626	0.06%	0.12%
Murinoglobulin-2	M0R5V7		0.13%
Myogenin	O70425	0.03%	
Myomegalin	Q9WUJ3	0.01%	
Myosin binding protein C, fast-type (Predicted)	D3ZA38		0.01%
Myosin heavy chain 7B	B6RK61		0.04%
Myosin light chain 1/3, skeletal muscle isoform	P02600	0.27%	0.47%
Myosin light chain 3	P16409	0.24%	0.40%
Myosin light chain 4	M0R4E1		0.12%
Myosin light polypeptide 6	A0A0G2JWE1		0.14%
Myosin phosphatase Rho-interacting protein	A0A0G2JUR5		0.00%
Myosin regulatory light chain	Q63781	0.02%	
Myosin regulatory light chain 2, skeletal muscle isoform	P04466	0.18%	0.40%
Myosin regulatory light chain 2, venicularcardiac muscle isoform	P08733	0.03%	
Myosin, heavy polypeptide 9, non-muscle	G3V6P7		0.04%

Myosin-11	Q63862	0.01%	
Myosin-3	P12847		0.13%
Myosin-4	Q29RW1	0.08%	
Myosin-7	G3V8B0	0.08%	0.19%
Myosin-9	Q62812	0.03%	
Neutrophil antibiotic peptide NP-2	Q62715	0.06%	
Neutrophil antibiotic peptide NP-4	Q62714	0.15%	0.05%
Neutrophil gelatinase-associated lipocalin	P30152	0.06%	0.05%
Neutrophilic granule protein (Predicted)	D3ZY96	0.16%	0.26%
NS5ATP4	Q6QN15_	0.02%	
Nuclear pore membrane glycoprotein 210	P11654	0.01%	
Nuclear receptor coactivator 5 (Predicted)	D3ZEI6	0.01%	
Nucleoside diphosphate kinase A	Q05982	0.06%	
Olfactory receptor	M0RCV9	0.06%	0.02%
P100 LMO7 variant protein	Q6J0M8		0.02%
p55 protein	Q5BK33	0.02%	
Parturition-related protein PRP3	Q6VPP3	0.01%	
Pentaxin	H6X319	0.08%	0.14%
Peptidyl-prolyl cis-trans isomerase	A0A0G2K1P0	0.02%	0.03%
Peripheral-type benzodiazepine receptor-associated protein 1	Q9JIR0	0.01%	
Peroxiredoxin-2	P35704	0.26%	0.29%
Phohate carrier protein, mitochondrial	Q6IRH6		0.05%
Phosphate carrier protein, mitochondrial	G3V741	0.03%	
Phosphatidylethanolamine-binding protein 1	P31044	0.02%	
Phosphodiesterase	Q76KC5	0.01%	0.01%
Phosphoglycerate kinase 1	P16617		0.03%
Phosphoglycerate mutase 1	P25113		0.03%
Phospholipid-transporting ATPase	M0R6E0		0.01%
Phosphopantothenoylcysteine decarboxylase (Predicted), isoform CRA_a	D3ZZZ5	0.03%	0.04%
Phytanoyl-CoA hydroxylase-interacting protein-like	Q6AYN4	0.02%	
Plasma protease C1 inhibitor	Q6P734		0.02%
Plasminogen	Q01177	0.04%	0.07%
Profilin-1	P62963	0.04%	0.06%
Proteasome inhibitor PI31 subunit	Q5XIU5	0.01%	

Protein Ablim1	A0A0G2JW01	0.03%	
Protein AMBP	Q64240		0.02%
Protein Ankhd1	E9PTK9	0.01%	0.01%
Protein Arhgdib	Q5M860		0.04%
Protein Asap2	A0A0G2K808	0.01%	
Protein Atg2b	F1MAF8		0.01%
Protein Atoh8	D4AA26		0.01%
Protein Bub1b	F1LMI1		0.01%
Protein Catsper3	F1LZS9	0.01%	
Protein Cbx2	M0RE14	0.02%	
Protein Ccdc138	D3ZGR6	0.01%	
Protein Cenpe	D3ZV60		0.01%
Protein Cep85l	A0A0G2K1W5		0.01%
Protein Cfh	F1M983	0.01%	
Protein Cit	E9PSL7		0.01%
Protein Cpn2	F1LQT4		0.02%
Protein Dicer1	E9PU15		0.00%
Protein Diras2	D3ZHX3	0.04%	0.05%
Protein disulfide-isomerase A3	P11598		0.04%
Protein disulfide-isomerase A6	Q63081	0.03%	0.02%
Protein Dock7	F1LRS2		0.01%
Protein Ears2	M0RAI4	0.04%	
Protein Eef2kmt	D3Z8P8		0.02%
Protein Epb4.1	A0A0G2KAK2		0.02%
Protein Ercc6l	D4A0G9	0.01%	
Protein Fam186a	A0A0G2K7H5		0.01%
Protein FAM228A	Q5XIN5	0.02%	
Protein FAM65B	Q7TP54		0.01%
Protein Fcgbp	D3ZJF8	0.01%	0.01%
Protein Fhad1	A0A140UHW9	0.01%	0.01%
Protein Frmd4a	A0A0G2K2R0	0.01%	0.01%
Protein Galnt9	A0A0G2K4G1		0.02%
Protein Gapvd1	D4A022	0.01%	
Protein Gltpd2	E9PTH4	0.01%	
Protein Gnptab	D3ZKE0		0.01%
Protein Gpr179	D4AA82		0.01%
Protein Hba-a2	A0A0G2JSV6	12.17%	10.23%
Protein Hbb-b1	A0A0G2JTW9	13.56%	11.69%
Protein Hdx	D4A457		0.02%
Protein Hydin (Fragment)	F1LSN6		0.01%
Protein Igdcc3	D3ZQ86	0.01%	0.01%
Protein Ighm	F1LN61		0.11%
Protein Itih2	D3ZFH5		0.01%

Protein Kif13b	A0A0G2K8Z9		0.01%
Protein Kif21a	D3ZYN2	0.01%	
Protein Kng2	F7EUK4	0.11%	0.27%
Protein Krt79 (Fragment)	A0A0G2JW69	0.07%	
Protein LOC100909468	Q80W83	0.01%	
Protein LOC100909605	F1M8F5		0.03%
Protein LOC100909700	M0R8W9		0.01%
Protein LOC102550932	D4AC64		0.01%
Protein LOC297568	A0A0G2K926	0.19%	0.43%
Protein LOC299282	A0A0G2JYK0	0.26%	0.96%
Protein LOC684828	M0R7B4		0.12%
Protein LOC691828	M0RA79		0.20%
Protein Map4k4	A0A0G2K7W4	0.00%	
Protein Mpo	A0A0G2K1A2	0.22%	0.26%
Protein Mst1r	D3ZYM4	0.01%	0.00%
Protein Myh1	A0A0G2K1V4	0.29%	1.56%
Protein NEWGENE_621351	A0A0G2K5E8		0.01%
Protein Ngdn	D3ZBL3	0.02%	
Protein Nobox	D3ZXL8	0.01%	
Protein Pcdhga1	D4ACT6		0.01%
Protein Prkx	Q5BK52		0.01%
Protein Rab37	D4A0G7	0.03%	
Protein Rac2	Q5U1Y2		0.04%
Protein Rasal1	D3ZHY9	0.01%	
Protein Rbsn	D3ZL11	0.01%	
Protein RGD1310507	A0A0G2K896	0.02%	0.08%
Protein RGD1560831	D3ZVH2		0.03%
Protein RGD1563692	B1WC80	0.01%	
Protein RGD1564420	F1M1B3	0.01%	
Protein Rif1	A0A0G2KB73	0.01%	
Protein Rundc1	F1LVT5	0.01%	
Protein S100-A8	P50115	0.39%	0.72%
Protein S100-A9	A0A0H2UHJ1	0.21%	0.50%
Protein Serpina3c	A0A0G2JSK1		0.17%
Protein Serpinc1	Q5M7T5	0.07%	0.19%
Protein Serpinf2	F7FHF3	0.01%	0.06%
Protein Sf3b1	G3V7T6	0.01%	
Protein Sh3pxd2a	A0A0G2JX92	0.01%	0.01%
Protein Sox8	D3ZR96		0.02%
Protein Spta1	D4A678	0.02%	0.01%
Protein Sptb	A0A140UHX6		0.01%
Protein Ssna1	B2RZ20	0.03%	
Protein Stom	Q5XI04	0.08%	0.09%

Protein Syde2	F1LVD8		0.01%
Protein Thbs1	A0A0G2JV24	0.01%	
Protein Tyrp1	D3ZH71	0.01%	
Protein Wrn	F1LTH9	0.01%	
Protein Zfp64	Q5U2X9	0.01%	0.02%
Protein Zranb3	D3ZDS8	0.01%	0.01%
Prothrombin	P18292	0.04%	0.03%
Putative lysozyme C-2	Q05820	0.03%	
Pyruvate kinase	A0A0G2JVG3	0.01%	
Pyruvate kinase PKM	P11980		0.08%
RAB10, member RAS oncogene family	Q5RKJ9		0.03%
Ras-related protein Rab-7a	A0A0G2K930	0.03%	
Ras-related protein Rab-9A	Q99P75	0.03%	
Ras-related protein Rap-1b	Q62636	0.03%	
Rat apolipoprotein E protein	Q65ZS7	0.19%	0.13%
Rat hemoglobin beta-chain (Fragment)	Q63223	1.27%	
Rat T-kininogen (T-KG)	Q63581	0.14%	0.20%
RCG21066	D3ZJW6	0.10%	
RCG56371	B2RYK3	0.01%	
Regulator of G-protein signaling 4	P49799	0.02%	
Retinol binding protein 4, plasma	B2RZC1	0.02%	
RGD1308350 protein (Fragment)	Q5I0K2		0.02%
Rho-associated protein kinase	A0A0G2K9I2	0.01%	0.01%
Sarcoplasmic/endoplasmic reticulum calcium ATPase 1	Q64578		0.05%
Septin-7	D4A0F5	0.02%	
Serine protease inhibitor A3K	P05545	0.05%	0.29%
Serine protease inhibitor A3L	P05544	0.06%	
Serine protease inhibitor A3N	P09006		0.39%
Serine/threonine-protein kinase Nek6	P59895	0.02%	
Serotransferrin	P12346	0.28%	0.69%
Serum albumin	P02770	4.36%	8.61%
Serum paraoxonase/arylesterase 1	P55159	0.03%	0.17%
Short ansient receptor potential channel 3	A0A0G2KAL8		0.01%
Short stature homeobox protein 2	G3V7M9		0.02%
Short-chain specific acyl-CoA dehydrogenase, mitochondrial	P15651	0.02%	0.02%
Sodium- and chloride-dependent glycine tranorter 1	P28572	0.01%	0.02%
Spermatid perinuclear RNA binding protein, isoform CRA_a	D3ZDD7	0.01%	

Spermatid perinuclear RNA-binding protein	Q9JKU6		0.01%
Stress-70 protein, mitochondrial	P48721		0.01%
Sulfotransferase	D3ZGJ6	0.02%	
Syntaxin 1A	Q9QXG3		0.01%
Thioredoxin	P11232	0.05%	0.10%
T-kininogen 1	P01048	0.08%	0.21%
Transitional endoplasmic reticulum ATPase	P46462	0.01%	0.01%
Transketolase	G3V826	0.01%	0.08%
Transthyretin	P02767	0.15%	0.28%
tRNA methylantrsferase 10 homolog A	A0A0G2K1N0	0.04%	
Tropomyosin 1, alpha, isoform CRA_h	Q91XN6		0.24%
Troponin T, fast skeletal muscle	A0A0H2UHY9	0.02%	0.05%
Tyrosine-protein kinase	Q501W1	0.01%	
UDP-glucuronosyltransferase	Q8VD43	0.01%	0.02%
UGT1A7	P70624		0.01%
Venicular zone-expressed PH domain-containing protein homolog 1	Q5PQS3	0.01%	
Vimentin	P31000	0.07%	0.15%
Vitamin D-binding protein	P04276	0.09%	
von Willebrand factor A domain-containing protein 7	Q6MG64		0.01%
Zero beta-globin (Fragment)	Q63011	3.13%	

Table S5. List of all detected proteins in the hard corona of HA and MHA scaffolds at 7 d implantation.

Protiens	**Uniprot access ID**	**Content (%)**	
		HA	**MHA**
10-formyltetrahydrofolate dehydrogenase	A0A0G2K0D8	0.07%	0.06%
14-3-3 protein epsilon	P62260		0.17%
14-3-3 protein zeta/delta	P63102	0.26%	0.37%
26S proteasome non-ATPase regulatory subunit 2	Q4FZT9	0.02%	0.01%
3-phosphoinositide-dependent protein kinase 1	O55173		0.02%
40S ribosomal protein S10	P63326	0.16%	
40S ribosomal protein S11	P62282	0.13%	
40S ribosomal protein S14	P13471	0.08%	0.18%
40S ribosomal protein S19	P17074	0.11%	0.13%
40S ribosomal protein S2	P27952	0.09%	

40S ribosomal protein S25	P62853	0.14%	0.11%
40S ribosomal protein S3	P62909	0.12%	0.11%
40S ribosomal protein S3a	Q6TXJ6		0.04%
40S ribosomal protein S4	A0A0H2UHX3	0.12%	0.12%
40S ribosomal protein S5	A0A0G2K200		0.07%
40S ribosomal protein S7	P62083		0.10%
40S ribosomal protein S8	P62243	0.05%	
40S ribosomal protein S9	P29314	0.06%	0.11%
60 kDa heat shock protein, mitochondrial	P63039	0.05%	
60S ribosomal protein L10	Q6PDV7	0.08%	0.09%
60S ribosomal protein L11	A0A0G2K3Y8	0.06%	
60S ribosomal protein L12	A0A140TAC5	0.42%	0.24%
60S ribosomal protein L13	F1M2E9	0.13%	0.18%
60S ribosomal protein L13a	Q5RK10		0.06%
60S ribosomal protein L18	P12001		0.07%
60S ribosomal protein L18a	P62718	0.06%	
60S ribosomal protein L28	Q642E2	0.08%	
60S ribosomal protein L3	P21531		0.05%
60S ribosomal protein L36	P39032	0.10%	0.12%
60S ribosomal protein L7	B0K031	0.06%	
6-phosphogluconate dehydrogenase, decarboxylating	P85968		0.06%
78 kDa glucose-regulated protein	P06761	0.19%	0.14%
A kinase (PRKA) anchor protein 3	Q66HC6	0.01%	
Ac1873	Q7TQ70	0.56%	1.32%
Aconitate hydratase, mitochondrial	Q9ER34	0.05%	0.03%
Actin, alpha skeletal muscle	P68136	0.55%	0.51%
Actin, cytoplasmic 1	A0A0G2K3K2	0.83%	0.71%
Actinin alpha 2	D3ZCV0	0.14%	
Actin-related protein 2	Q5M7U6	0.08%	0.12%
Actin-related protein 2/3 complex subunit 2	P85970		0.09%
Actin-related protein 2/3 complex subunit 3	B2GV73		0.07%
Actin-related protein 2/3 complex subunit 4	B2RZ72	0.13%	
Actin-related protein 3	Q4V7C7	0.04%	0.03%
Actn3 protein	B2GVB3	0.12%	
Acylamino-acid-releasing enzyme	P13676	0.01%	
Adenine phosphoribosyltransferase	P36972		0.16%
Adenylyl cyclase-associated protein 1	Q08163		0.03%
ADP/ATP translocase 1	Q6P9Y4	0.19%	0.16%

ADP/ATP translocase 2	Q09073		0.17%
ADP-ribosylation factor 4	P61751		0.22%
ADP-ribosylation factor 5	P84083		0.17%
Afamin	G3V9R9	0.07%	
Afm protein (Fragment)	Q5BJP7		0.06%
AHNAK 1 (Fragment)	Q38PG0	0.31%	
AHNAK nucleoprotein	A0A0G2JU96		0.01%
A-kinase-anchoring protein 9	A0A0G2K548		0.01%
Aldehyde dehydrogenase, mitochondrial	P11884		0.05%
Aldehyde oxidase 2	Q5QE78	0.01%	
Alpha globin	Q63910	0.79%	
Alpha glucosidase 2 alpha neutral subunit (Predicted)	D3ZAN3	0.01%	
Alpha hemoglobin-stabilizing protein	A9UMW3	0.16%	0.19%
Alpha-1-acid glycoprotein	P02764	0.11%	0.12%
Alpha-1-antiproteinase	P17475	0.37%	0.48%
Alpha-1-inhibitor 3	P14046		0.32%
Alpha-1-inhibitor III	G3V9J1	0.63%	0.34%
Alpha-1-macroglobulin	Q63041	0.37%	0.40%
Alpha-2 antiplasmin	Q80ZA3	0.11%	0.09%
Alpha-2-HS-glycoprotein	P24090	0.50%	0.35%
Anionic trypsin-1	P00762	0.12%	0.06%
Ankyrin 1	D3Z9Z0	0.10%	0.06%
Ankyrin repeat and SOCS box-containing 1	B5DF97	0.04%	
Ankyrin repeat domain 34B	D3ZKP1	0.02%	0.04%
Annexin	Q5U362	0.28%	0.30%
Annexin A1	P07150	0.28%	0.64%
Annexin A2	Q07936	0.39%	0.26%
Annexin A3	P14669		0.14%
Annexin A4	P55260	0.03%	0.04%
Annexin A5	P14668	0.17%	
Annexin A6	P48037	0.07%	
AP-3 complex subunit mu-1	Q6IRG9		0.03%
Apolipoprotein A-I	P04639	0.58%	0.73%
Apolipoprotein A-IV	P02651	0.22%	0.38%
Apolipoprotein B-100	Q7TMA5		0.01%
Apolipoprotein E	Q6PAH0	0.69%	0.60%
Apolipoprotein N	Q5M890		0.05%
Apoptosis facilitator Bcl-2-like protein 14	Q6AYK4	0.03%	0.08%
Aquaporin-1	A0A0G2K3E0	0.05%	0.06%

ArfGAP with SH3 domain, ankyrin repeat and PH domain 2	A0A0G2K808	0.02%	0.02%
Argininosuccinate synthase	P09034		0.05%
Arylacetamide deacetylase	Q9QZH8	0.06%	
Aspartate aminotransferase, mitochondrial	P00507	0.04%	
ATP synthase F(0) complex subunit B1, mitochondrial	P19511	0.04%	0.08%
ATP synthase subunit alpha	F1LP05	0.26%	0.16%
ATP synthase subunit alpha, mitochondrial	P15999		0.22%
ATP synthase subunit beta	G3V6D3	0.17%	
ATP synthase subunit beta, mitochondrial	P10719		0.19%
ATP synthase subunit delta, mitochondrial	G3V7Y3	0.10%	
ATP synthase subunit f, mitochondrial	D3ZAF6	0.13%	0.14%
ATP-dependent 6-phosphofructokinase	A0A0G2KBC7	0.01%	0.03%
ATP-dependent RNA helicase DDX39A	Q5U216	0.04%	
AT-rich interactive domain-containing protein 4B	Q9JKB5	0.01%	
Band 3 anion transport protein	P23562	0.13%	0.06%
Basigin	Q6GT74		0.05%
B-cell receptor-associated protein 31	Q6AY58	0.09%	0.10%
Beta-2-glycoprotein 1	P26644	0.10%	0.15%
Beta-enolase	P15429		0.10%
Beta-galactosidase	D3ZUM4		0.02%
Bifunctional purine biosynthesis protein PURH	O35567	0.03%	0.02%
Biglycan	P47853	0.08%	
Biliverdin reductase B	B5DF65	0.32%	0.23%
Bone marrow proteoglycan	Q63189		0.09%
Bone morphogenetic protein receptor type-1A	Q78EA7		0.03%
Bspry protein (Fragment)	Q0D2H5		0.04%
C4b-binding protein alpha chain	Q5M891	0.03%	0.08%
C9 protein	Q5BKC4		0.13%
Calcium-activated potassium channel subunit beta-3	A7VL23	0.05%	
Calcium-transporting ATPase	D3ZHJ6	0.04%	0.10%
Calcium-transporting ATPase type 2C member 2	Q8R4C1	0.03%	

Calml4 protein	B0BNB8	0.07%	
Calnexin	P35565	0.03%	
Calreticulin	P18418	0.15%	0.14%
Canopy 2 homolog (Zebrafish)	A0JN30	0.12%	0.14%
CAP-Gly domain-containing linker protein 2	O55156		0.01%
Carbonic anhydrase 1	B0BNN3	0.73%	0.57%
Carbonic anhydrase 2	P27139	0.64%	0.60%
Carboxylic ester hydrolase	D3ZGK7	0.05%	0.04%
Carboxypeptidase	Q6AYS3	0.02%	
Carboxypeptidase B2	Q9EQV9	0.05%	0.07%
Catalase	P04762	0.18%	0.11%
Catheliciding antimicrobial peptide	G3V8S9	0.06%	
Cathepsin B	P00787	0.04%	
Cathepsin D	P24268		0.03%
Cathepsin G	G3V9Q7	0.07%	0.25%
Cathepsin Z	Q9R1T3	0.06%	0.09%
Cation channel sperm-associated protein subunit delta	B5DFM7		0.02%
Cationic amino acid transporter 2	B5D5N9	0.03%	0.05%
CD177 antigen-like	M0R8W9		0.03%
Cd72 molecule	Q5BK59	0.03%	0.05%
Ceruloplasmin	G3V7K3	0.19%	0.22%
Chaperonin subunit 8 (Theta) (Predicted), isoform CRA_a	D4ACB8		0.02%
Chloride intracellular channel 1	A8USN8		0.11%
Chloride intracellular channel protein 1	Q6MG61	0.11%	0.11%
Citrate lyase subunit beta-like protein, mitochondrial	Q5I0K3	0.04%	
Clathrin heavy chain	F1M779		0.03%
Clathrin heavy chain 1	P11442	0.03%	
Clusterin	P05371	0.33%	0.34%
Coactosin-like protein	B0BNA5	0.20%	0.14%
Coagulation factor IX	P16296	0.04%	
Coagulation factor X (Fragment)	Q63109	0.11%	
Coagulation factor XII	A0A0H2UI19	0.02%	
Coagulation factor XIII A chain	G3V811	0.09%	0.06%
Cofilin-1	P45592	0.17%	0.28%
Coiled-coil domain-containing 180	F1LXD9		0.01%
Coiled-coil domain-containing protein 60	Q3ZAV0	0.02%	
Collagen alpha-1(I) chain	P02454	0.12%	0.07%
Collagen alpha-1(XII) chain	A0A0G2KAJ7	0.03%	

Collagen alpha-2(I) chain	A0A0G2KAN1	0.04%	0.03%
Collagen type VI alpha 1 chain	D3ZUL3	0.12%	
Collagen type XVI alpha 1 chain	F1LND0	0.01%	
Complement C3	M0RBJ7	0.38%	0.44%
Complement C5	A0A096P6L9	0.01%	0.04%
Complement C7	A0A0G2K7X7	0.01%	
Complement C8 alpha chain	D3ZWD6	0.03%	0.03%
Complement component 4A (Rodgers blood group)	A0A0G2JW12		0.08%
Complement component C8 beta chain	P55314	0.04%	0.06%
Complement component C9	Q62930	0.15%	
Complement factor B	G3V615	0.04%	
Complement factor H	G3V9R2		0.02%
Complement factor I	A0A0G2K135		0.02%
Copine 3	D3ZLA3		0.05%
Coronin-1A	Q91ZN1	0.11%	0.23%
Corticosteroid-binding globulin	P31211	0.13%	0.07%
CRAMP (Fragment)	Q71KM5		0.20%
Creatine kinase B-type	P07335	0.07%	
Creatine kinase M-type	P00564	0.25%	0.21%
Creatine kinase S-type, mitochondrial	P09605	0.07%	
CUE domain-containing protein 2	A1L131	0.04%	
Cyclic nucleotide-gated channel beta subunit	O35788		0.01%
Cysteine-rich protein 1	P63255	0.15%	
Cytochrome b-245 beta chain	Q9ERL1	0.03%	
Cytochrome b-245 light chain	Q62737		0.11%
Cytochrome b-c1 complex subunit 1, mitochondrial	Q68FY0		0.07%
Cytochrome c oxidase subunit 2	S5RZM8	0.12%	0.15%
Cytochrome c oxidase subunit 5A, mitochondrial	P11240		0.18%
Cytoplasmic dynein 1 heavy chain 1	P38650	0.00%	0.00%
Cytoskeleton-associated protein 4	D3ZH41	0.14%	0.06%
DCN1-like protein	D4AD48		0.05%
Decorin	Q01129	0.08%	
Dedicator of cyto-kinesis 1	D3ZZW1	0.01%	
Dedicator of cytokinesis 8	F1LPG2		0.01%
Dermcidin	Q71DI1	0.11%	
Desmin	P48675	0.26%	0.15%
Desmoglein-4	Q6W3B0	0.01%	
Dicer 1 ribonuclease III	E9PU15	0.01%	
Dispatched RND transporter family	D3ZBZ6		0.02%

member 2			
DNA polymerase	G3V8M1	0.01%	
DNA polymerase delta catalytic subunit	O54747		0.02%
Dolichyl-diphosphooligosaccharide--protein glycosyltransferase subunit 1	Q6P7A7	0.05%	0.03%
Dolichyl-diphosphooligosaccharide--protein glycosyltransferase subunit DAD1	P61805	0.15%	0.24%
Dual specificity mitogen-activated protein kinase kinase 5	Q62862	0.06%	0.05%
Dynein, axonemal, heavy chain 9	F1LV07		0.00%
EH-domain containing 4	Q8R3Z7	0.02%	
Elongation factor 1-alpha	M0R757	0.35%	
Elongation factor 1-alpha 1	P62630		0.37%
Elongation factor 1-gamma	Q68FR6	0.05%	
Elongation factor 2	P05197	0.05%	0.05%
Elongator complex protein 5	Q6IUP3		0.06%
Endoplasmin	Q66HD0	0.16%	0.19%
Endothelial type gp91-phox	Q9ER28		0.04%
Enolase 1, (Alpha)	Q5EB49	0.18%	0.35%
Eosinophil peroxidase	D3ZSY4		0.11%
Epsilon 1 globin	O88752	0.47%	0.37%
Erythrocyte membrane protein band 4.1	A0A0G2KAK2	0.03%	
Erythrocyte membrane protein band 4.2	B5DF57	0.04%	
Eukaryotic initiation factor 4A-II	Q5RKI1	0.04%	0.07%
Eukaryotic translation initiation factor 4B	Q5RKG9		0.02%
Exocyst complex component 8	O54924		0.02%
Exportin for tRNA	D3ZZ62		0.04%
Extracellular matrix protein 1	Q62894		0.04%
FAM50A protein (Fragment)	B5DF16	0.04%	
Family with sequence similarity 192, member A	Q6AY90	0.04%	
Fatty acid desaturase 6	D3ZEE9	0.03%	
Fc fragment of IgG-binding protein	D3ZJF8	0.01%	0.01%
FERM domain-containing 4A	D3ZU85	0.03%	0.02%
Fermitin family member 3	B2GVB9		0.04%
Ferritin	M0R597	0.76%	0.94%
Fetub protein	Q6IRS6	0.12%	
Fetuin-B	Q9QX79		0.20%
Fga protein	A1L114	1.27%	
Fga protein (Fragment)	Q4G044		1.48%
Fibrinogen beta chain	P14480	1.05%	1.70%

Fibrinogen gamma chain	P02680	0.97%	1.13%
Fibronectin	A0A096P6L8	0.26%	0.30%
Fibulin-1	B1WC21		0.02%
Filamin A	C0JPT7	0.04%	0.06%
Filamin-C	D3ZHA0	0.01%	
Follistatin-like 5	A0A096MK67	0.01%	
Forkhead box L2	D4A0S1	0.03%	
Formyl peptide receptor,-related sequence 3	D3ZX41	0.03%	0.06%
Fructose-bisphosphate aldolase A	P05065	0.21%	0.14%
Galectin	V5QRT9	0.10%	
Galectin-1	P11762	0.34%	0.24%
Galectin-5	P47967	0.23%	
Gelsolin	Q68FP1	0.20%	0.21%
Gene	Q8CJG5	0.02%	
Glial fibrillary acidic protein	P47819		0.07%
Glial fibrillary acidic protein beta (Fragment)	A1E251	0.08%	
Globin a1	Q62669	2.61%	2.33%
Globin a2	A0A1K0FUA6	3.70%	
Globin a4	A0A0G2JSW3	7.09%	3.71%
Globin c2	A0A0G2JSV6	7.74%	5.59%
Glucose-6-phosphate 1-dehydrogenase	P05370	0.09%	0.06%
Glucose-6-phosphate isomerase	Q6P6V0	0.02%	0.04%
Glutamate dehydrogenase 1, mitochondrial	P10860		0.02%
Glutamate receptor 1	A0A0G2K798		0.03%
Glutamine gamma-glutamyltransferase 2 (Fragment)	A0A0B5AGL6	0.09%	
Glutamyl-prolyl-tRNA synthetase	A0A0G2JZI2		0.01%
Glutamyl-tRNA synthetase 2, mitochondrial	M0RAI4	0.04%	
Glutathione peroxidase 1	P04041	0.14%	0.13%
Glyceraldehyde-3-phosphate dehydrogenase	M0R660	0.45%	0.57%
Glycogen phosphorylase, liver form	P09811	0.01%	0.04%
Golgi apparatus protein 1	Q62638		0.01%
Granzyme-like protein 1	Q06605		0.05%
Group specific component	Q68FY4		0.05%
GTP-binding nuclear protein Ran, testis-specific isoform	Q8K586	0.08%	
GTP-binding protein G-alpha-i2 splice variant a (Fragment)	Q5EEY4	0.06%	

Guanine deaminase	Q9JKB7	0.14%	0.16%
Guanine nucleotide binding protein alpha inhibiting 2	Q45QN0		0.07%
Guanine nucleotide-binding protein G(olf) subunit alpha	G3V8E8		0.06%
Guanine nucleotide-binding protein subunit beta-4	A0A0G2K8M9		0.10%
Gypsy retrotransposon integrase-like protein 1	Q66H30		0.04%
H1 histone family, member O, oocyte-specific	D3ZEG0	0.03%	
Haptoglobin	A0A0H2UHM3	0.46%	0.53%
Heat shock cognate 71 kDa protein	D4A4S3	0.16%	0.23%
Heat shock protein HSP 90-alpha	P82995	0.06%	0.08%
Heat shock protein HSP 90-beta	P34058	0.17%	0.11%
Heme oxygenase 1	P06762	0.04%	
Hemoglobin subunit alpha-1/2	P01946	5.81%	3.16%
Hemoglobin subunit beta-1	P02091	7.09%	5.49%
Hemoglobin subunit beta-2	P11517		4.69%
Hemoglobin, beta adult major chain	A0A0G2JTW9	4.82%	3.91%
Hemopexin	P20059	0.90%	1.10%
Heparin cofactor 2	A0A0G2K8K3	0.07%	0.05%
Heterogeneous nuclear ribonucleoprotein A3	Q6URK4		0.06%
Heterogeneous nuclear ribonucleoprotein F	Q794E4		0.06%
Heterogeneous nuclear ribonucleoprotein K	Q5D059		0.04%
Heterogeneous nuclear ribonucleoprotein M	F1LV13	0.02%	
Heterogeneous nuclear ribonucleoproteins A2/B1	F1LM82	0.23%	0.25%
HID1 domain-containing	D4A0C3		0.02%
High density lipoprotein binding protein (Vigilin)	Q3KRF2	0.02%	
Histidine-rich glycoprotein	A0A0G2K9Y5	0.11%	0.23%
Histone acetyltransferase	A0A0A0MY12		0.01%
Histone H1.4	P15865		0.31%
Histone H2A	D4ACV3		0.23%
Histone H2B	D3ZNH4		1.39%
Histone H2B type 1	Q00715	0.32%	
Histone H3	B0BMY8	0.31%	0.67%
Histone H4	P62804	1.28%	2.25%

Histone-lysine N-methyltransferase	G3V6U9	0.02%	0.03%
HIV-1 Tat interactive protein 2	A0A0G2QC15		0.05%
Ig gamma-2B chain C region	P20761	0.16%	0.30%
Ig lambda-2 chain C region	P20767		0.25%
Igh-6 protein	Q569B3	0.19%	0.28%
Ighg protein	Q4VBH1		0.12%
Inosine-5'-monophosphate dehydrogenase 2	E9PU28	0.02%	0.03%
Insulin-like growth factor binding protein, acid labile subunit, isoform CRA_b	F1LRE2		0.02%
Integrin alpha M	G3V8L7		0.03%
Integrin beta	D3ZP06	0.02%	0.02%
Integrin beta-6	Q6AYF4		0.03%
Inter alpha-trypsin inhibitor, heavy chain 4	Q5EBC0		0.15%
Inter-alpha trypsin inhibitor, heavy chain 1	B2RYM3	0.05%	0.08%
Inter-alpha-trypsin inhibitor heavy chain H3	D3ZBS2	0.08%	0.10%
Interferon-induced protein with tetratricopeptide repeats 1B-like	A0A096MJ38		0.10%
Intraflagellar transport 74	Q5XIR2		0.02%
Intraflagellar transport protein 80 homolog	Q66HB3	0.02%	0.02%
IQ motif containing GTPase activating protein 1 (Predicted), isoform CRA_b	G3V7Q7	0.01%	
Iqgap1 protein (Fragment)	B5DFH1		0.02%
Kallistatin	P97569	0.04%	
Kelch repeat and BTB (POZ) domain containing 3 (Predicted), isoform CRA_a	D4A7F5	0.02%	0.02%
Kinectin 1	D4A4Z9		0.01%
Kinesin-like protein KIF27	Q7M6Z5	0.01%	
Kininogen	Q6LE95	0.84%	
Kng2 protein	Q5M8A0		0.16%
Lamin A, isoform CRA_b	G3V8L3		0.11%
Lamin-B receptor	O08984		0.03%
Leucine rich repeat containing 2	Q5U2S4	0.04%	
Leucine-rich alpha-2-glycoprotein 1	Q5I0E1		0.08%
Leucine-rich repeat-containing 47	F1LT49	0.03%	
Leukocyte elastase inhibitor A	Q4G075	0.05%	0.28%
Leukocyte surface antigen CD47	P97829	0.04%	0.10%

Leukotriene A(4) hydrolase	Q499P2		0.05%
Lipase	D4AA61	0.03%	
Liprin beta 2 (Fragment)	Q5UDQ9		0.02%
LIX1-like protein	Q5PQQ7	0.04%	
L-lactate dehydrogenase	B5DEN4		0.17%
L-lactate dehydrogenase A chain	P04642	0.37%	
LOC367586 protein	Q5M7V3	0.42%	0.34%
LOC500183 protein	Q4KM66		0.32%
LOC683667 protein	B0BNJ1		0.17%
Long-chain-fatty-acid--CoA ligase 3	Q63151		0.02%
Low molecular weight phosphotyrosine protein phosphatase	P41498	0.07%	
LRRGT00087	Q6TUF7		0.08%
Lumican	P51886	0.05%	
Lymphocyte cytosolic protein 1	A0A0G2K014	0.10%	0.12%
Lymphotoxin B receptor	Q5U2S8	0.03%	
Malate dehydrogenase, cytoplasmic	O88989		0.06%
Malate dehydrogenase, mitochondrial	P04636	0.07%	0.12%
MAPK-regulated co-repressor-interacting protein 2	D3ZM07	0.07%	
Matrix metalloproteinase-14	Q10739	0.02%	
Meiosis-specific with coiled-coil domain	D4A1P7	0.02%	0.02%
Membrane-associated guanylate kinase, WW and PDZ domain-containing protein 1	Q4L1J4	0.01%	0.04%
Metalloendopeptidase	F1M798		0.02%
Microtubule-actin cross-linking factor 1	A0A0G2JWA8	0.01%	0.01%
Moesin	A0A096MK30	0.08%	0.12%
Monocarboxylate transporter 4	O35910		0.03%
Multidrug resistance-associated protein 6	O88269		0.01%
Murinoglobulin-1	Q03626		0.25%
Murinoglobulin-2	Q6IE52	0.31%	0.43%
Myelin expression factor 2	D4AEI5	0.02%	
Myeloperoxidase	A0A0G2K1A2	0.17%	0.38%
Myl6 protein	B2GV99		0.26%
Myoglobin	A0A1K0FUB2		0.13%
Myomegalin	A0A0G2K463	0.00%	0.01%
Myosin binding protein C, fast-type (Predicted)	D3ZA38		0.05%
Myosin heavy chain 1	F1LRV9	1.38%	1.08%
Myosin heavy chain 14	F1LNF0	0.03%	0.05%

Myosin light chain 1/3, skeletal muscle isoform	P02600	0.52%	0.59%
Myosin light chain 3	P19945	0.33%	0.17%
Myosin light polypeptide 6	Q64119	0.19%	
Myosin regulatory light chain 12B	P18666		0.07%
Myosin regulatory light chain 2, skeletal muscle isoform	P04466	0.42%	0.42%
Myosin regulatory light chain 2, ventricular/cardiac muscle isoform	D3Z9K3		0.08%
Myosin VC	F1M111		0.01%
Myosin, heavy polypeptide 9, non-muscle	G3V6P7	0.08%	0.14%
Myosin-11	A0A0G2K6S9	0.04%	0.06%
Myosin-3	G3V6D8	0.21%	0.26%
Myosin-4	Q29RW1	0.39%	
Myosin-6	P02563	0.43%	0.16%
Myosin-7	G3V8B0	0.40%	0.20%
NAD kinase 2, mitochondrial	Q1HCL7	0.03%	
NADH dehydrogenase [ubiquinone] 1 alpha subcomplex subunit 5	Q63362	0.20%	
NADH:ubiquinone oxidoreductase subunit A4	B2RZD6	0.13%	0.23%
Nascent polypeptide-associated complex alpha subunit	M0R9L0	0.01%	
Ncf4 protein	B2RZ98		0.04%
Neutrophil antibiotic peptide NP-4	Q62714	0.19%	0.15%
Neutrophil collagenase	O88766		0.08%
Neutrophilic granule protein	D3ZY96	0.14%	0.55%
Non imprinted in Prader-Willi/Angelman syndrome 2	D3ZUV1	0.05%	
Non-histone chromosomal protein HMG-17	P18437		0.30%
Olfactomedin 4	D3ZMI6		0.07%
Olfactory receptor	A0A0G2K0A4	0.09%	0.04%
p55 protein	Q6F6B2	0.02%	
Patatin-like phospholipase domain containing 5 (Predicted)	D3ZXU1	0.02%	
Patatin-like phospholipase domain-containing 1	D4A3G9		0.02%
Pcbp2 protein	Q4V8F6	0.05%	0.06%
Pentaxin	H6X331	0.05%	0.24%
Peptidyl-prolyl cis-trans isomerase	A0A0G2K1P0	0.26%	0.36%
Peptidyl-prolyl cis-trans isomerase B	P24368	0.19%	

Peptidylprolyl isomerase	Q5U2V1	0.03%	
Periostin	A0A097BW25	0.02%	
Peroxiredoxin-1	Q63716	0.42%	0.29%
Peroxiredoxin-2	P35704	0.57%	0.26%
Peroxiredoxin-5, mitochondrial	Q9R063	0.26%	0.14%
Phosphate carrier protein, mitochondrial	P16036	0.03%	0.06%
Phosphodiesterase	Q76KC5		0.02%
Phosphoglycerate kinase 1	P16617	0.27%	0.25%
Phosphoglycerate mutase	Q6P6G4	0.09%	0.06%
Phosphoglycerate mutase 2	P16290		0.05%
Phospholipase B-like 1	Q5U2V4		0.05%
Pinin, desmosome-associated protein	D3ZAY8		0.02%
Plasminogen	Q01177	0.17%	0.25%
Plasminogen activator inhibitor 1 RNA-binding protein	Q6AXS5	0.03%	
Platelet factor 4	P06765		0.13%
Plectin	P30427	0.02%	0.01%
Plexin B2	D3ZQ57		0.01%
Plexin domain containing 2	B5DEZ8	0.04%	
Poly [ADP-ribose] polymerase 1	P27008		0.01%
Polypyrimidine tract-binding protein 1	Q00438	0.02%	
PRA1 family protein 3	Q9ES40		0.07%
Prefoldin subunit 3	M0R919		0.10%
Prelamin-A/C	P48679	0.26%	
Probable tubulin polyglutamylase TTLL1	Q5PPI9		0.05%
Procollagen-lysine,2-oxoglutarate 5-dioxygenase 2	G3V9I0	0.04%	0.03%
Profilaggrin (Fragment)	Q8CIU0	0.02%	
Profilin-1	P62963	0.21%	0.52%
Prohibitin-2	A0A0G2KB63	0.04%	0.11%
Prosaposin	P10960	0.02%	0.03%
Proteasome (Prosome, macropain) 26S subunit, non-ATPase, 12	Q5XIC6	0.02%	
Protein AMBP	Q64240	0.03%	0.04%
Protein C, isoform CRA_b	F7FMY6	0.06%	
Protein disulfide-isomerase	P04785	0.38%	0.25%
Protein disulfide-isomerase A3	P11598		0.10%
Protein disulfide-isomerase A4	P38659	0.02%	
Protein disulfide-isomerase A6	Q63081	0.09%	0.04%
Protein FAM228A	Q5XIN5		0.04%
Protein FAM46B	B0BNK8	0.04%	0.03%

Protein phosphatase 2 (Formerly 2A), regulatory subunit A (PR 65), alpha isoform, isoform CRA_a	Q5XI34	0.02%	
Protein piccolo	Q9JKS6		0.01%
Protein PRRC2A	Q6MG48	0.01%	
Protein S100-A11	Q6B345		0.33%
Protein S100-A4	P05942	0.33%	0.37%
Protein S100-A8	P50115	0.31%	0.85%
Protein S100-A9	P50116	0.78%	1.25%
Protein transport protein Sec31A	Q9Z2Q1	0.02%	
Protein unc-13 homolog C	A0A0G2KAK7		0.01%
Protein Wnt	F2Z3U1	0.03%	
Protein Z-dependent protease inhibitor	Q62975		0.05%
Prothrombin	G3V843	0.09%	0.09%
Putative uncharacterized protein RGD1308559_predicted	D3ZP60		0.01%
Pyruvate kinase	M0RD14	0.25%	
Pyruvate kinase PKM	P11980	0.24%	0.28%
RAB1A, member RAS oncogene family	E9PU16	0.09%	
RAB1B, member RAS oncogene family-like	G3V6H0		0.19%
Ras suppressor protein 1	D4A8F2	0.04%	0.05%
Ras-related protein Rab-11B	O35509	0.05%	0.09%
Ras-related protein Rab-14	P61107		0.09%
Ras-related protein Rab-7a	P09527	0.09%	0.27%
Ras-related protein Rap-1b	Q62636	0.11%	
RCG20603	A0A0G2JSK1	0.32%	0.24%
RCG21066	D3ZJW6	0.19%	0.22%
RCG28930, isoform CRA_b	M0R3Z8		0.01%
RCG32340, isoform CRA_a	Q5U2X9		0.02%
RCG33981, isoform CRA_a	Q68FT8		0.08%
RCG43880	D3ZPV2	0.02%	
RCG45259	M0R7B4	0.13%	
RCG45278, isoform CRA_a	F1M6T3	0.01%	
RCG45489, isoform CRA_a	Q5XI04	0.06%	0.30%
RCG55135, isoform CRA_b	G3V852	0.01%	0.01%
RCG56676, isoform CRA_b	A0A0G2K5Y3	0.09%	
Receptor of activated protein C kinase 1	P63245	0.07%	0.11%
Regulating synaptic membrane exocytosis protein 2	Q9JIS1		0.01%
Regulator of G-protein signaling 9	P49805	0.02%	0.02%

Reticulon	Q540J3		0.03%
Reticulon-4	Q9JK11	0.01%	
Rho GDP dissociation inhibitor beta	Q5M860		0.13%
Rho GDP-dissociation inhibitor 1	Q5XI73		0.10%
RhoA (Fragment)	O35791	0.16%	
Rhophilin, Rho GTPase binding protein 2 (Predicted)	D4A8N7	0.04%	0.04%
Ribosomal protein S11	Q6PDV9		0.20%
Ribosome-binding protein 1	F1M853	0.02%	0.01%
Ring finger protein 20	D3ZYQ9		0.01%
RNA exonuclease 1 homolog	D3ZCX6		0.01%
RoBo-1	A0A0G2K0S2		0.06%
Rps16 protein (Fragment)	Q6P3E1	0.07%	
Ryanodine receptor 3	F1LPJ2		0.00%
S1 RNA-binding domain 1	D4A9B0	0.02%	0.02%
SAP domain-containing ribonucleoprotein	Q498U4		0.06%
Sec1 family domain-containing protein 1	Q62991	0.02%	
Sema domain, immunoglobulin domain (Ig), short basic domain, secreted, (Semaphorin) 3 F (Predicted), isoform CRA_a	D3ZGX9		0.03%
Septin-9	Q9QZR6		0.02%
Serine (Or cysteine) peptidase inhibitor, clade C (Antithrombin), member 1	Q5M7T5	0.33%	0.49%
Serine (Or cysteine) proteinase inhibitor, clade A (Alpha-1 antiproteinase, antitrypsin), member 4	Q5M8C3		0.08%
Serine and arginine repetitive matrix 1	A0A0G2K4F6		0.02%
Serine protease inhibitor	A0A0G2JYK0	0.69%	0.94%
Serine protease inhibitor A3F-like	F1M8F5	0.05%	
Serine/threonine-protein kinase ULK3	D3ZHP7		0.03%
Serotransferrin	P12346	0.90%	1.18%
Serpin B5	P70564	0.03%	
Serpin family F member 2	F7FHF3	0.10%	
Serpin H1	P29457	0.14%	0.07%
Serum albumin	P02770	3.39%	3.86%
Serum amyloid A protein	Q5M878		0.43%
Serum paraoxonase/arylesterase 1	P55159	0.13%	0.21%
SH3 and multiple ankyrin repeat domains protein 1	Q9WV48		0.01%
Sialate O-acetylesterase	A0A0A0MY22		0.03%

Signal peptidase complex catalytic subunit SEC11A	P42667	0.06%	
Similar to FLJ35784 protein	D3Z9Q6	0.02%	
Similar to potassium channel tetramerisation domain-containing 12b	F1M1A6	0.04%	
Similar to ribosomal protein S13	M0RCY2	0.17%	
Similar to vitamin A-deficient testicular protein 11-like	M0R6C8		0.01%
Small kinetochore-associated protein	Q6AXN6		0.09%
SMC5 structural maintenance of chromosomes 5-like 1 (Yeast) (Predicted), isoform CRA_a	D4A9F0	0.01%	
SMC6 structural maintenance of chromosomes 6-like 1 (Yeast) (Predicted)	D4AB26	0.04%	
Sn1-specific diacylglycerol lipase alpha	Q5YLM1	0.02%	0.03%
Sodium- and chloride-dependent glycine transporter 1	P28572	0.03%	0.03%
Sodium/potassium-transporting ATPase subunit alpha-1	P06685	0.02%	
SP120	Q63555		0.02%
SPARC/osteonectin, cwcv and kazal-like domains proteoglycan 2	A0A0G2K946	0.04%	0.03%
Spectrin beta chain	A0A140UHX6	0.10%	0.04%
Spectrin, alpha, erythrocytic 1	D4A678	0.08%	0.05%
Spindle and kinetochore-associated protein 1	B0BN28		0.05%
Splicing factor proline/glutamine rich (Polypyrimidine tract binding protein associated)	Q4KM71	0.02%	
Superoxide dismutase [Cu-Zn]	P07632	0.19%	
Superoxide dismutase [Mn], mitochondrial	P07895		0.23%
Supervillin	F1M155		0.01%
TBC1 domain family, member 31	A0A0G2JVE4		0.01%
T-complex protein 1 subunit beta	Q5XIM9	0.02%	0.03%
T-complex protein 1 subunit delta	Q7TPB1	0.02%	
Tectonin beta-propeller repeat-containing 2	D4A6U4	0.01%	
Tenascin C	A0A0G2K1L0	0.05%	0.02%
Tenascin N	D3ZK14	0.04%	
Tetratricopeptide repeat domain 37	D3ZL50		0.01%
Tetratricopeptide repeat domain 8	B1WBT5	0.03%	0.04%

TFIIH basal transcription factor complex helicase XPB subunit	Q4G005	0.01%	
Thioredoxin	P11232	0.16%	0.19%
Thrombospondin 1	Q71SA3	0.05%	
T-kininogen 1	P01048	0.37%	0.44%
T-kininogen 2	P08932	0.34%	0.31%
Tmprss13 protein	B2RYJ5	0.03%	0.04%
Toll-like receptor 7	A5H2Z9	0.02%	0.02%
Transaldolase	Q9EQS0		0.16%
Transforming growth factor, beta-induced	D4A8G5	0.02%	
Transforming protein RhoA	P61589		0.14%
Transgelin	P31232	0.08%	
Transgelin-2	Q5XFX0	0.06%	
Transitional endoplasmic reticulum ATPase	P46462	0.05%	0.04%
Transketolase	P50137	0.06%	0.16%
Translationally-controlled tumor protein	P63029	0.16%	0.08%
Transmembrane 9 superfamily member 4	Q4KLL4	0.02%	
Transmembrane emp24 domain-containing protein 10	Q63584	0.08%	0.12%
Transmembrane emp24 domain-containing protein 2	Q63524	0.06%	
Transmembrane emp24 domain-containing protein 9	Q5I0E7		0.11%
Transthyretin	P02767	0.48%	0.60%
Tribbles homolog 1 (Drosophila)	G3V6J8	0.03%	
Trimethylguanosine synthase	P85107	0.04%	0.05%
Triosephosphate isomerase	A0A0G2JWJ4	0.24%	0.19%
tRNA methyltransferase 10 homolog A	Q4KLI2	0.15%	0.14%
Tropomyosin alpha-3 chain	Q63610	0.35%	0.33%
Tropomyosin alpha-4 chain	P09495	0.34%	
Tropomyosin beta chain	P58775	0.30%	
Troponin T, fast skeletal muscle	P09739	0.10%	0.17%
Tubby-like protein	D3ZWB5	0.04%	
Tubulin alpha-4A chain	Q5XIF6		0.12%
Tubulin beta-5 chain	P69897	0.06%	
Tudor domain-containing protein 5	A0A0H2UHC6		0.01%
Tuftelin-interacting protein 11	Q5U2Y6	0.01%	
Tyrosine-protein kinase	D3ZDS3	0.03%	0.04%
Ubc protein (Fragment)	Q5FWT0	0.05%	

Ubiquitin-like modifier-activating enzyme 1	Q5U300	0.01%	
Ubiquitinyl hydrolase 1	D3ZVQ0	0.02%	
Vacuolar protein sorting-associated protein 52 homolog	O55166	0.02%	
Versican core protein	A0A0G2K944	0.00%	
Very long-chain specific acyl-CoA dehydrogenase, mitochondrial	P45953	0.02%	
Vimentin	P31000	0.70%	0.62%
Vinculin	A0A0G2K8V2	0.01%	
Vitamin D-binding protein	P04276	0.06%	0.34%
Vitronectin	Q3KR94	0.39%	0.30%
Voltage-dependent anion-selective channel protein 1	Q9Z2L0	0.08%	0.15%
Voltage-dependent anion-selective channel protein 2	P81155		0.14%
Vomeronasal 2 receptor, 47	F1MAL4		0.02%
Vomeronasal V1r-type receptor V1rg13	Q5J3J5	0.04%	
V-type proton ATPase subunit G	Q8R2H0	0.23%	
WD repeat and FYVE domain-containing 3	A0A0G2K9M4	0.00%	
WWC family member 3	M0R8P6		0.01%
Zinc finger and BTB domain containing 2 (Predicted)	D4ABS0	0.04%	0.05%
Zinc finger CCCH-type antiviral protein 1	Q8K3Y6	0.01%	0.01%
Zinc finger protein 638	D4A0U3		0.01%

Table S6. List of all detected proteins in the hard corona of HA and MHA scaffolds at 14 d implantation.

Protiens	**Uniprot access ID**	**Content (%)**	
		HA	**MHA**
10-formyltetrahydrofolate dehydrogenase	A0A0G2K0D8	0.04%	0.05%
14-3-3 protein beta/alpha	P35213	0.31%	0.27%
14-3-3 protein epsilon	P62260	0.34%	
14-3-3 protein eta	P68511	0.12%	
14-3-3 protein gamma	P61983	0.35%	0.17%
14-3-3 protein theta	P68255	0.41%	0.34%
14-3-3 protein zeta/delta	A0A0G2JV65	0.49%	0.30%
2'-5'-oligoadenylate synthase-like protein 2	Q5MYT9	0.02%	

26S protease regulatory subunit 8	P62198	0.02%	
26S proteasome non-ATPase regulatory subunit 2	Q4FZT9	0.04%	0.03%
2-oxoglutarate dehydrogenase, mitochondrial	Q5XI78	0.01%	0.05%
30 kDa adipocyte complement-related protein	Q8K3R4	0.04%	
3-hydroxyacyl-CoA dehydrogenase type-2	B0BMW2	0.08%	
3-mercaptopyruvate sulfurtransferase	P97532	0.04%	
40S ribosomal protein S11	P62282		0.25%
40S ribosomal protein S12	P63324	0.33%	0.21%
40S ribosomal protein S13	P62278	0.19%	0.28%
40S ribosomal protein S14	P13471	0.15%	0.16%
40S ribosomal protein S19	P17074	0.31%	0.26%
40S ribosomal protein S26	D3Z8D7	0.14%	0.09%
40S ribosomal protein S3	P62909	0.26%	0.23%
40S ribosomal protein S3a	P49242	0.08%	0.10%
40S ribosomal protein S4	X1WI37	0.41%	0.24%
40S ribosomal protein S5	B0BN81	0.12%	
40S ribosomal protein S6	M0RD75	0.17%	0.09%
40S ribosomal protein S7	P62083	0.14%	0.16%
40S ribosomal protein S8	P62243	0.10%	0.12%
40S ribosomal protein S9	A0A0G2K4C4		0.32%
40S ribosomal protein SA	P38983	0.07%	0.07%
60 kDa heat shock protein, mitochondrial	P63039	0.10%	0.12%
60S acidic ribosomal protein P0	P19945	0.19%	0.18%
60S ribosomal protein L10	Q6PDV7	0.13%	0.10%
60S ribosomal protein L10a	P62907		0.07%
60S ribosomal protein L11	A0A0G2K3Y8	0.12%	0.11%
60S ribosomal protein L13	D3ZRM9	0.27%	0.23%
60S ribosomal protein L15	P61314	0.08%	0.08%
60S ribosomal protein L18	A0A0H2UHS7		0.11%
60S ribosomal protein L18a	F1M0K6		0.06%
60S ribosomal protein L19	P84100	0.06%	
60S ribosomal protein L23	P62832	0.22%	0.11%
60S ribosomal protein L26	P12749		0.18%
60S ribosomal protein L3	P21531	0.04%	0.09%
60S ribosomal protein L35	P17078	0.25%	
60S ribosomal protein L36	D3ZJJ6	0.08%	
60S ribosomal protein L4	Q6P3V9	0.10%	0.02%
60S ribosomal protein L5	P09895	0.21%	0.19%

60S ribosomal protein L6	F1LQS3	0.26%	0.08%
60S ribosomal protein L7	P05426	0.14%	0.08%
60S ribosomal protein L7a	F1M013	0.05%	
60S ribosomal protein L8	P62919	0.08%	0.10%
60S ribosomal protein L9	P17077		0.05%
6-phosphogluconate dehydrogenase, decarboxylating	Q7TP11	0.07%	0.13%
6-phosphogluconolactonase	G3V8D5	0.03%	
78 kDa glucose-regulated protein	P06761	0.34%	0.38%
Aa2-028	Q7TMC3	0.02%	0.03%
Ab1-205	Q7TP91		0.02%
ABRA C-terminal-like	D3ZSL2	0.16%	
Ac1873	Q7TQ70	0.32%	0.40%
Acid phosphatase 5, tartrate resistant, isoform CRA_b	A0A0G2K6Z6	0.04%	
Acidic leucine-rich nuclear phosphoprotein 32 family member A	P49911	0.03%	0.08%
Acidic leucine-rich nuclear phosphoprotein 32 family member B	F1LP34	0.03%	
Aconitate hydratase, mitochondrial	Q9ER34	0.14%	0.14%
Actin, alpha cardiac muscle 1	P68035	0.63%	0.86%
Actin, cytoplasmic 1	A0A0G2K3K2	0.73%	0.71%
Actin-related protein 2	Q5M7U6	0.13%	0.18%
Actin-related protein 2/3 complex subunit 1B	O88656	0.16%	0.04%
Actin-related protein 2/3 complex subunit 3	B2GV73		0.06%
Actin-related protein 2/3 complex subunit 4	B2RZ72	0.29%	0.26%
Actin-related protein 2/3 complex subunit 5	Q4KLF8	0.06%	
Actin-related protein 3	Q4V7C7	0.04%	0.09%
ADAMTS-like 3	D4ADD4	0.01%	
Adenine phosphoribosyltransferase	P36972	0.05%	
Adenosylhomocysteinase	P10760	0.09%	
Adenylyl cyclase-associated protein 1	Q08163	0.10%	0.07%
Adipocyte enhancer-binding protein 1	A2RUV9	0.01%	0.02%
Adipocyte lipid-binding protein	Q9R290	0.14%	
ADP/ATP translocase 1	Q05962	0.13%	0.23%
ADP/ATP translocase 2	Q09073	0.06%	0.16%
ADP-ribosylation factor 1	P84079		0.16%
ADP-ribosylation factor 3	P61206	0.14%	
ADP-ribosylation factor 5	P84083		0.17%

ADP-ribosylation factor-like protein 8B	Q66HA6	0.05%	0.05%
Afamin	G3V9R9	0.04%	0.11%
AHNAK nucleoprotein	A0A0G2JU96	0.02%	0.02%
A-kinase anchor protein SPHKAP	F1LNS0	0.01%	0.01%
Alcohol dehydrogenase [NADP(+)]	P51635	0.08%	0.07%
Aldehyde dehydrogenase 18 family, member A1	D3ZIE9	0.02%	
Aldehyde dehydrogenase, mitochondrial	F1LN88	0.10%	0.04%
Alpha globin	Q63910	0.66%	0.73%
Alpha glucosidase 2 alpha neutral subunit (Predicted)	D3ZAN3	0.06%	0.05%
Alpha II spectrin	C9EH87	0.01%	
Alpha-1,4 glucan phosphorylase	G3V8V3		0.02%
Alpha-1-acid glycoprotein	A0A0H2UHF8		0.05%
Alpha-1-antiproteinase	A0A0G2JZ73	0.43%	0.41%
Alpha-1-inhibitor 3	P14046	0.28%	
Alpha-1-inhibitor III	A0A0G2K926	0.20%	0.36%
Alpha-1-macroglobulin	Q63041	0.24%	0.25%
Alpha-2 antiplasmin	Q80ZA3	0.22%	0.15%
Alpha-2-HS-glycoprotein	P24090	0.41%	0.31%
Alpha-actinin-1	Q6T487		0.07%
Alpha-actinin-4	Q9QXQ0	0.19%	0.17%
Alport syndrome, mental retardation, midface hypoplasia and elliptocytosis chromosomal region gene 1	D3ZBY1	0.03%	0.06%
Amine oxidase	D3ZLJ6	0.01%	
Aminopeptidase N	G3V7W7	0.03%	0.02%
Anaphase promoting complex subunit 7 (Predicted)	D3ZIT4	0.02%	0.02%
Angiotensin-converting enzyme	M0RB66	0.01%	
Angiotensinogen	P01015	0.02%	
Anion exchange protein	F8WFT7	0.08%	
Anionic trypsin-1	P00762	0.04%	
Ankyrin 1	D3Z9Z0	0.04%	0.02%
Annexin	Q5U362	0.80%	0.31%
Annexin A1	P07150	0.42%	0.36%
Annexin A2	Q07936	0.67%	0.37%
Annexin A5	P14668		0.31%
Annexin A6	P48037	0.16%	
AP-1 complex subunit beta-1	P52303	0.01%	
AP-2 complex subunit alpha-2	A0A0G2K943	0.02%	
AP-2 complex subunit mu	P84092	0.04%	0.04%

AP-3 complex subunit mu-2	P53678	0.02%	0.02%
Apolipoprotein A-I	P04639	0.24%	0.48%
Apolipoprotein A-IV	A0A0G2JVX7		0.15%
Apolipoprotein B-100	Q7TMA5	0.00%	0.00%
Apolipoprotein E	A0A0G2K151		0.65%
Apolipoprotein H	Q5I0M1	0.08%	0.08%
Apolipoprotein N	Q5M890		0.04%
Apoptosis facilitator Bcl-2-like protein 14	Q6AYK4	0.05%	0.04%
Aquaporin-1	A0A0G2K3E0	0.08%	
Aquaporin-9	P56627	0.03%	
ArfGAP with SH3 domain, ankyrin repeat and PH domain 2	A0A0G2K808		0.02%
Arginase-1	P07824		0.07%
Arginine-rich, mutated in early stage tumors (Predicted), isoform CRA_b	B2RZ09		0.07%
Arp2/3 complex 34 kDa subunit	A0A0G2K9A2	0.06%	0.13%
Arrestin domain containing 2, isoform CRA_a	D3ZPW1	0.07%	0.05%
Aspartate aminotransferase, mitochondrial	P00507	0.10%	0.05%
Asporin	Q5XIH1	0.22%	
ATP synthase F(0) complex subunit B1, mitochondrial	P19511	0.05%	
ATP synthase subunit alpha	F1LP05	0.25%	0.31%
ATP synthase subunit beta	G3V6D3		0.15%
ATP synthase subunit beta, mitochondrial	P10719	0.24%	
ATP synthase subunit d, mitochondrial	P31399		0.11%
ATP synthase subunit delta, mitochondrial	G3V7Y3	0.10%	0.22%
ATP synthase subunit f, mitochondrial	D3ZAF6		0.18%
ATP synthase subunit gamma, mitochondrial	P35435	0.04%	
ATP synthase subunit O, mitochondrial	Q06647	0.04%	
ATPase H+-transporting V0 subunit D1	Q5M7T6		0.07%
ATPase H+-transporting V1 subunit A	D4A133	0.09%	0.07%
ATP-dependent 6-phosphofructokinase	Q6P783	0.02%	
ATP-dependent RNA helicase DDX39A	Q5U216	0.08%	0.09%
Autophagy-related 16-like 1	A0A0G2K9U6	0.03%	0.05%
Band 3 anion transport protein	P23562		0.05%
Basonuclin 2	D3ZZ22	0.01%	

B-cell receptor-associated protein 31	Q6AY58	0.10%	
Beta-galactosidase	D3ZUM4	0.05%	
Beta-glucuronidase	P06760		0.03%
Beta-hexosaminidase subunit alpha	Q641X3	0.02%	
Beta-hexosaminidase subunit beta	Q6AXR4	0.02%	0.03%
Bifunctional purine biosynthesis protein PURH	O35567	0.04%	0.03%
Biglycan	P47853	0.20%	0.18%
Biliverdin reductase B	B5DF65	0.16%	0.17%
BUB1 mitotic checkpoint serine/threonine kinase B	F1LMI1	0.02%	0.02%
BWK4	Q5VLR5	0.06%	
C4b-binding protein alpha chain	Q63514	0.03%	0.04%
Calcium-transporting ATPase	A0A0G2JZ57		0.02%
Calmodulin-regulated spectrin-associated protein family, member 2	D4AEC2	0.01%	
Calmodulin-regulated spectrin-associated protein family, member 3	A0A0G2K5C0		0.01%
Calnexin	P35565	0.14%	0.12%
Calpain small subunit 1	M0RD20	0.05%	
Calpain-2 catalytic subunit	Q07009	0.05%	0.05%
Calponin-3	P37397	0.06%	
Calreticulin	P18418	0.32%	0.28%
Canopy 2 homolog (Zebrafish)	A0JN30	0.06%	
Caprin-1	A0A0G2K8H0		0.01%
Carbonic anhydrase 1	B0BNN3	0.55%	0.41%
Carbonic anhydrase 2	P27139	0.55%	0.44%
Carboxypeptidase	Q6AYS3	0.07%	0.02%
Carboxypeptidase B2	Q9EQV9	0.03%	
Carboxypeptidase D	Q9JHW1	0.01%	
Carboxypeptidase Q	Q6IRK9	0.04%	
Catalase	P04762	0.12%	0.07%
Catechol O-methyltransferase	P22734	0.06%	
Cathelicidin antimicrobial peptide	G3V8S9		0.12%
Cathepsin B	P00787		0.07%
Cathepsin D	Q6P6T6	0.13%	0.07%
Cathepsin G	G3V9Q7		0.09%
Cathepsin K	O35186	0.14%	0.08%
Cathepsin S	D3ZZR3	0.03%	
Cathepsin Z	Q9R1T3	0.04%	0.03%
Cation-dependent mannose-6-phosphate receptor	Q6AY20		0.05%
Cationic amino acid transporter 2	B5D5N9	0.04%	

CD44 antigen	D3ZGF1		0.02%
Cd68 molecule	Q4FZY1		0.04%
Cd72 molecule	Q5BK59	0.02%	
CD9 antigen	P40241	0.04%	
Cell division control protein 42 homolog	Q8CFN2	0.11%	0.11%
Centromere protein E	D3ZV60		0.01%
Centromere protein O	M0R9I1	0.03%	0.04%
Centrosomal protein 135	D3ZI35	0.01%	
Centrosomal protein 164	M0R9A9	0.01%	
Centrosomal protein 250	F1M7J7	0.00%	
Centrosomal protein 290	A0A0G2K715		0.01%
Ceruloplasmin	A0A0G2K9I6	0.15%	0.13%
Chaperonin 10	P97601	0.18%	
Chaperonin containing Tcp1, subunit 6A (Zeta 1)	Q3MHS9	0.07%	0.06%
Chaperonin subunit 8 (Theta) (Predicted), isoform CRA_a	D4ACB8	0.04%	0.06%
Chaperonin-containing TCP1 subunit 7	D4AC23	0.06%	0.04%
Chloride intracellular channel 1	A8USN8	0.11%	0.16%
Chloride intracellular channel protein 1	Q6MG61	0.10%	0.10%
Cilia and flagella-associated protein 58	A0A096MJJ4	0.01%	
Citrate synthase, mitochondrial	Q8VHF5	0.03%	
Clathrin heavy chain	F1M779	0.12%	0.07%
Clathrin light chain	Q5PPP1	0.07%	
Clusterin	G3V836	0.13%	0.15%
Coactosin-like protein	B0BNA5	0.26%	0.32%
Coagulation factor XIII A chain	G3V811	0.04%	0.07%
Coatomer subunit alpha	G3V6T1	0.04%	0.03%
Coatomer subunit beta	P23514	0.02%	
Coatomer subunit beta'	Q5M7X1	0.04%	0.03%
Coatomer subunit delta	Q66H80	0.06%	0.04%
Coatomer subunit gamma	A0A0G2K1F3	0.02%	
Cofilin-1	P45592	0.32%	0.31%
Coiled-coil domain-containing 180	F1LXD9	0.01%	
Coiled-coil domain-containing 187	D3ZUA4		0.01%
Coiled-coil domain-containing 88C	D4A9W1	0.01%	
Coiled-coil domain-containing protein 60	A0A140TAG2	0.02%	
Coiled-coil domain-containing protein 86	Q5XIB5		0.04%
Collagen alpha-1(I) chain	P02454	0.12%	0.12%
Collagen alpha-1(XI) chain	P20909	0.01%	0.01%

Collagen alpha-1(XII) chain	A0A0G2KAJ7	0.22%	0.16%
Collagen alpha-1(XXIII) chain	D3ZFT7		0.02%
Collagen alpha-2(I) chain	P02466	0.05%	0.03%
Collagen beta(1-O)galactosyltransferase 1	B1H282	0.01%	
Collagen triple helix repeat-containing protein 1	Q8CG08		0.04%
Collagen type V alpha 2 chain	F1LQ00	0.01%	
Collagen type VI alpha 1 chain	D3ZUL3	0.26%	0.18%
Collagen type VI alpha 2 chain	F1LNH3	0.23%	0.15%
Complement C3	M0RBJ7	0.28%	0.33%
Complement C4	P08649	0.03%	
Complement C7	A0A0G2K7X7	0.01%	0.01%
Complement C8 alpha chain	D3ZWD6	0.05%	0.02%
Complement component 1 Q subcomponent-binding protein, mitochondrial	O35796	0.03%	
Complement component 4, gene 1	Q6MG79		0.05%
Complement component C8 beta chain	P55314		0.05%
Complement component C9	F7F389	0.08%	0.15%
Complement factor B	G3V615	0.01%	
Complement inhibitory factor H	Q91YB6		0.02%
COP9 signalosome complex subunit 1	A0A0G2JW80	0.03%	
Copine 4 protein	H1UBM8	0.02%	
Copine 8	B5DEX3		0.02%
Copine-1	D4A1R8	0.02%	
Core histone macro-H2A	A0A140TAB4	0.02%	
Coronin	G3V624	0.05%	0.03%
Coronin-1A	Q91ZN1	0.15%	0.21%
Creatine kinase B-type	P07335	0.26%	0.31%
Creatine kinase M-type	P00564		0.15%
CREB/ATF bZIP transcription factor	D3ZU42	0.03%	
C-type mannose receptor 2	Q4TU93	0.02%	
Cullin-associated NEDD8-dissociated protein 1	P97536	0.01%	
Cyclic nucleotide-gated cation channel beta subunit	O55157	0.02%	
Cyclic nucleotide-gated channel beta 1	F1LQB8		0.01%
Cystatin-B	P01041	0.29%	0.28%
Cysteine protease	M0R5T6	0.04%	
Cysteine-rich protein 1	P63255		0.26%
Cytochrome b-245 light chain	Q62737	0.13%	0.05%
Cytochrome b-c1 complex subunit 1,	Q68FY0	0.10%	0.08%

mitochondrial			
Cytochrome b-c1 complex subunit 2, mitochondrial	P32551	0.04%	
Cytochrome b-c1 complex subunit 8	Q7TQ16	0.19%	0.14%
Cytochrome b-c1 complex subunit Rieske, mitochondrial	P20788	0.11%	0.17%
Cytochrome c oxidase subunit 2	Q37652	0.11%	0.11%
Cytochrome c oxidase subunit 4 isoform 1, mitochondrial	P10888		0.10%
Cytochrome c oxidase subunit 5A, mitochondrial	P11240	0.17%	0.25%
Cytochrome c-1	D3ZFQ8	0.03%	
Cytoplasmic dynein 1 heavy chain 1	M0R9X8	0.01%	0.01%
Cytoplasmic linker-associated protein 1	A0A0G2JTD7	0.01%	
Cytoskeleton-associated protein 4	D3ZH41	0.32%	0.26%
Cytosol aminopeptidase	Q68FS4	0.03%	
Cytosolic non-specific dipeptidase	Q6Q0N1	0.04%	
DCN1-like protein	D4AD48	0.14%	0.09%
DEAD (Asp-Glu-Ala-Asp) box polypeptide 5	Q6AYI1		0.02%
DEAD (Asp-Glu-Ala-Asp) box polypeptide 5 (Fragment)	B6DTP5	0.05%	
Decorin	Q01129	0.16%	0.15%
Dedicator of cyto-kinesis 1	D3ZZW1	0.01%	0.01%
Dedicator of cytokinesis 8	F1LPG2		0.01%
DENN domain-containing 4C	A0A0G2K089		0.01%
Deoxynucleotidyltransferase, terminal	Q5EB91	0.03%	
Desmin	Q6P725	0.22%	0.26%
Dihydrolipoyl dehydrogenase, mitochondrial	Q6P6R2	0.03%	
Dihydrolipoyllysine-residue acetyltransferase component of pyruvate dehydrogenase complex, mitochondrial	P08461	0.02%	0.03%
Dihydropyrimidinase-related protein 2	P47942	0.14%	0.08%
Dipeptidyl peptidase 2	Q9EPB1	0.06%	0.05%
Dipeptidyl peptidase 3	O55096		0.02%
Disabled homolog 2	F1LMP9	0.04%	
Dispatched RND transporter family member 2	D3ZBZ6	0.01%	0.01%
DNA (cytosine-5)-methyltransferase	F1LQT9		0.02%
DNA damage-binding protein 1	G3V8T4	0.01%	
DNA polymerase delta catalytic subunit	O54747	0.01%	0.01%

Dolichyl-diphosphooligosaccharide--protein glycosyltransferase 48 kDa subunit	Q641Y0	0.07%	0.10%
Dolichyl-diphosphooligosaccharide--protein glycosyltransferase subunit 1	Q6P7A7	0.12%	0.17%
Dolichyl-diphosphooligosaccharide--protein glycosyltransferase subunit 2	P25235	0.08%	0.04%
Dolichyl-diphosphooligosaccharide--protein glycosyltransferase subunit DAD1	P61805		0.09%
Dual specificity mitogen-activated protein kinase kinase 5	Q62862	0.05%	0.06%
Dual-specificity tyrosine phosphorylation-regulated kinase 4	A0A0G2JU41	0.03%	0.03%
Dynamin-2	P39052		0.05%
Dynein heavy chain 1, axonemal	Q63164	0.00%	
E3 ubiquitin-protein ligase HUWE1	A0A0G2JVW5	0.00%	
E3 ubiquitin-protein ligase NEDD4	Q62940	0.01%	
E3 ubiquitin-protein ligase TRIP12	F1LP64	0.01%	
EF-hand domain-containing protein D2	Q4FZY0	0.04%	0.04%
EH-domain containing 4	Q8R3Z7		0.04%
Elastin microfibril interfacer 1	D3Z9E1	0.04%	0.04%
Electron transfer flavoprotein subunit beta	Q68FU3	0.10%	
Elongation factor 1-alpha	M0R757	0.20%	
Elongation factor 1-alpha 1	P62630		0.44%
Elongation factor 1-alpha 2	P62632	0.18%	
Elongation factor 1-delta	Q68FR9	0.12%	0.08%
Elongation factor 1-gamma	Q68FR6	0.18%	0.10%
Elongation factor 2	P05197	0.13%	0.13%
Elongation factor Tu, mitochondrial	P85834		0.02%
Embigin	O88775		0.03%
Endoplasmic reticulum mannosyl-oligosaccharide 1,2-alpha-mannosidase	B2GUY0		0.02%
Endoplasmic reticulum resident protein 29	P52555	0.03%	
Endoplasmin	A0A0A0MY09	0.23%	0.23%
Endothelial type gp91-phox	Q9ER28	0.05%	0.04%
Enolase 1, (Alpha)	Q5BJ93	0.46%	
Epidermal fatty acid binding protein 5 (Fragment)	Q2XTA4		0.10%
Epsilon 1 globin	O88752	0.21%	0.30%
Erythroid spectrin alpha	Q6XDA1	0.02%	

Estradiol 17-beta-dehydrogenase 11	Q6AYS8	0.04%	0.08%
Eukaryotic peptide chain release factor subunit 1	Q5U2Q7	0.04%	
Eukaryotic translation elongation factor 1 beta 2	B5DEN5	0.09%	
Eukaryotic translation initiation factor 2 subunit 1	P68101	0.03%	0.05%
Eukaryotic translation initiation factor 3 subunit A	Q1JU68	0.01%	
Eukaryotic translation initiation factor 3 subunit E	Q641X8	0.02%	
Eukaryotic translation initiation factor 4A1	Q6P3V8	0.13%	0.17%
Eukaryotic translation initiation factor 4E	P63074		0.06%
Eukaryotic translation initiation factor 5A-1	Q3T1J1		0.10%
Exocyst complex component 8	O54924	0.01%	
Extended synaptotagmin-1	Q9Z1X1	0.01%	0.01%
F-actin-capping protein subunit alpha-2	Q3T1K5	0.06%	0.07%
F-actin-capping protein subunit beta	A0A0G2JYB1	0.04%	
Fam49b protein	B2GUZ9	0.04%	0.03%
Family with sequence similarity 89, member B	Q566R4	0.04%	
Fascin	P85845	0.09%	0.03%
FAT atypical cadherin 4	D3ZEH1		0.00%
Fatty acid-binding protein, adipocyte	P70623		0.39%
Fatty acid-binding protein, epidermal	P55053	0.09%	
Fbxl13 protein	Q5PQK0	0.03%	
Fc fragment of IgG-binding protein	D3ZJF8	0.01%	
FCF1 rRNA-processing protein	Q1RP75		0.06%
FERM domain-containing 4A	A0A0G2K2R0	0.03%	
Fermitin family member 3	B2GVB9	0.03%	0.03%
Ferritin	M0R6L9		0.71%
Ferritin (Fragment)	A0JPM7	0.29%	
Ferritin light chain 1	P02793	0.58%	0.47%
Fetub protein	Q6IRS6		0.12%
Fetuin-B	Q9QX79	0.12%	
Fibrinogen beta chain	P14480	0.56%	0.50%
Fibrinogen gamma chain	P02680	0.55%	0.78%
Fibromodulin	P50609	0.06%	
Fibronectin	P04937	0.18%	0.18%
Fibulin 2	G3V6X1	0.01%	

Fibulin-1	D3ZQ25	0.02%	
Filamin A	C0JPT7	0.17%	0.14%
Filamin B	A0A0G2JXT8	0.02%	
Frizzled-4	Q9QZH0	0.02%	
Fructose-bisphosphate aldolase A	P05065	0.36%	0.35%
Galectin	V5QSV9	0.11%	0.46%
Galectin-1	P11762	0.49%	0.31%
Galectin-5	P47967	0.18%	0.07%
Gelsolin	Q68FP1	0.21%	0.24%
Glioblastoma amplified sequence	Q5RK08		0.03%
Globin a1	Q62669	2.51%	2.64%
Globin a2	A0A1K0FUA6		3.66%
Globin a4	A0A0G2JSW3	2.49%	4.50%
Globin c2	A0A0G2JSV6	2.84%	3.65%
Globin c3	B1H216		2.51%
Glucosamine-6-phosphate isomerase	B5DFC6	0.03%	
Glucose-6-phosphate 1-dehydrogenase	P05370	0.10%	0.11%
Glucose-6-phosphate isomerase	Q6P6V0	0.05%	0.02%
Glutamate dehydrogenase 1, mitochondrial	P10860	0.12%	0.08%
Glutamyl-prolyl-tRNA synthetase	Q6TXE9	0.01%	0.01%
Glutathione peroxidase	M0RAM5	0.14%	
Glyceraldehyde-3-phosphate dehydrogenase	M0R660	1.15%	0.50%
Glycogen phosphorylase, liver form	P09811	0.01%	
GM2 ganglioside activator	Q6IN37		0.07%
G-protein coupled estrogen receptor 1	O08878		0.03%
Group specific component	Q68FY4	0.07%	0.10%
Growth regulation by estrogen in breast cancer 1	F1LW89	0.00%	
GTP-binding nuclear protein Ran	Q66H11	0.11%	0.22%
Guanine deaminase	Q9WTT6	0.12%	0.10%
Guanine nucleotide binding protein beta 4 (Fragment)	Q45QL2	0.13%	
Guanine nucleotide-binding protein G(i) subunit alpha-2	P04897		0.07%
Guanine nucleotide-binding protein G(olf) subunit alpha	G3V8E8	0.08%	0.14%
Guanine nucleotide-binding protein subunit alpha-13	Q6Q7Y5		0.06%
Guanine nucleotide-binding protein subunit beta-4	O35353		0.15%
Haptoglobin	A0A0H2UHM3	0.21%	0.27%

HEAT repeat-containing 1	A0A0G2JV87		0.01%
Heat shock 70 kDa protein 4	O88600	0.03%	
Heat shock cognate 71 kDa protein	P63018	0.38%	0.22%
Heat shock protein HSP 90-alpha	P82995	0.16%	0.19%
Heat shock protein HSP 90-beta	P34058	0.23%	0.26%
Helicase, POLQ-like	E9PT19		0.01%
Heme oxygenase 1	P06762	0.06%	0.10%
Hemoglobin subunit alpha-1/2	P01946	1.76%	
Hemoglobin subunit beta-1	P02091	4.17%	4.63%
Hemoglobin subunit beta-2	P11517	2.11%	
Hemoglobin, beta adult major chain	A0A0G2JTW9	3.01%	3.15%
Hemopexin	P20059	0.66%	0.63%
Heparin cofactor 2	A0A0G2K8K3	0.04%	0.03%
Hepatic triacylglycerol lipase	P07867	0.02%	0.02%
Hepatocyte growth factor-regulated tyrosine kinase substrate	A0A140TAH1		0.02%
Heterogeneous nuclear ribonucleoprotein A/B	Q9QX81	0.05%	
Heterogeneous nuclear ribonucleoprotein A1	P04256	0.26%	0.21%
Heterogeneous nuclear ribonucleoprotein A3	D4A6A2	0.16%	0.17%
Heterogeneous nuclear ribonucleoprotein C	G3V9R8	0.10%	0.08%
Heterogeneous nuclear ribonucleoprotein D0	Q9JJ54	0.07%	0.07%
Heterogeneous nuclear ribonucleoprotein F	Q794E4		0.08%
Heterogeneous nuclear ribonucleoprotein H	G3V9Q3	0.14%	0.07%
Heterogeneous nuclear ribonucleoprotein K	P61980	0.15%	0.12%
Heterogeneous nuclear ribonucleoprotein M	F1M3D3	0.05%	0.05%
Heterogeneous nuclear ribonucleoprotein Q	Q7TP47	0.02%	
Heterogeneous nuclear ribonucleoprotein U	Q6IMY8		0.03%
Heterogeneous nuclear ribonucleoproteins A2/B1	F1LNF1	0.47%	0.46%
Hexokinase-1	P05708		0.01%
Hexokinase-3	P27926		0.01%
Hippocalcin-like protein 1	P62749	0.04%	

HIRA-interacting protein 3	E9PSX7	0.03%	0.05%
Histidine-rich glycoprotein	A0A0G2K3G0	0.17%	0.15%
Histone H1.0	P43278	0.05%	
Histone H1.4	P15865		0.27%
Histone H1.5	D3ZBN0	0.16%	
Histone H2A	K7S2S2	0.18%	0.37%
Histone H2A.Z	P0C0S7	0.10%	
Histone H2B	A0A0G2JXI9	0.70%	1.00%
Histone H3	M0RBX6	0.48%	0.61%
Histone H4	P62804	1.66%	1.50%
Histone-lysine N-methyltransferase	G3V6U9	0.02%	
Hnrnpl protein (Fragment)	B5DFG2	0.03%	
Hsc70-interacting protein	P50503		0.03%
Hydroxyacyl-coenzyme A dehydrogenase, mitochondrial	Q9WVK7	0.04%	
Hypoxia up-regulated protein 1	Q63617		0.02%
Ig gamma-2B chain C region	P20761	0.25%	0.21%
Ig lambda-2 chain C region	P20767	0.25%	
Igh-6 protein	Q3B8R4	0.12%	0.14%
Immunoglobulin superfamily-containing leucine-rich repeat 2	M0R4G0		0.01%
Importin subunit beta-1	P52296	0.01%	0.01%
Inhibitor of nuclear factor kappa-B kinase-interacting protein	Q5EAJ6	0.07%	
Inosine-5'-monophosphate dehydrogenase	Q6P9U9		0.04%
Inosine-5'-monophosphate dehydrogenase 2	E9PU28	0.03%	
Inositol monophosphatase 1	P97697		0.08%
Integrator complex subunit 7	D4ADS6		0.01%
Integrin alpha M	G3V8L7		0.03%
Integrin beta	B2RYB8	0.10%	0.09%
Integrin beta-1	P49134		0.02%
Integrin subunit alpha V	A0A0G2JVZ6	0.01%	
Inter alpha-trypsin inhibitor, heavy chain 4	Q5EBC0	0.08%	
Inter-alpha trypsin inhibitor, heavy chain 1	B2RYM3	0.02%	0.04%
Inter-alpha-inhibitor H4 heavy chain	O35802		0.09%
Inter-alpha-trypsin inhibitor heavy chain H3	D3ZBS2	0.03%	0.05%
Intraflagellar transport 74	Q5XIR2	0.03%	0.03%
Intraflagellar transport protein 80	Q66HB3		0.02%

homolog			
IQ motif containing GTPase activating protein 1 (Predicted), isoform CRA_b	G3V7Q7	0.04%	0.04%
Isocitrate dehydrogenase [NAD] subunit alpha, mitochondrial	Q99NA5	0.05%	
Isocitrate dehydrogenase [NADP]	A0A0G2JUF6		0.07%
Isocitrate dehydrogenase [NADP] cytoplasmic	P41562	0.07%	0.05%
Isocitrate dehydrogenase [NADP], mitochondrial	P56574	0.21%	
Kelch repeat and BTB (POZ) domain containing 3 (Predicted), isoform CRA_a	D4A7F5	0.01%	
Kelch repeat and BTB domain-containing 12	D3ZQ37	0.02%	
KH domain-containing, RNA-binding, signal transduction-associated protein 1	Q91V33	0.04%	
KH domain-containing, RNA-binding, signal transduction-associated protein 3	Q9JLP1	0.09%	0.06%
Kinesin-like protein KIF27	Q7M6Z5	0.01%	
Kininogen	Q6LE95	0.49%	
Kininogen 1	Q5PQU1		0.16%
KN motif and ankyrin repeat domains 2	D4ACC2	0.02%	
Lamin A, isoform CRA_b	G3V8L3	0.27%	
Lamin-B1	G3V7U4	0.09%	0.09%
Laminin subunit alpha 2	F1M614	0.00%	
LDL receptor-related protein 1	G3V928	0.00%	
Leucine-rich repeat transmembrane protein FLRT3	B1H234	0.01%	
Leucine-rich repeat-containing 47	F1LT49	0.02%	0.03%
Leucine-rich repeat-containing protein 59	Q5RJR8	0.20%	0.13%
Leukocyte common antigen	Q6LDZ3		0.02%
Leukocyte elastase inhibitor A	Q4G075		0.08%
Leukocyte surface antigen CD47	A0A0G2JTH4	0.06%	0.08%
LIM and cysteine-rich domains 1	Q6AYF2		0.03%
LIM and SH3 domain protein 1	Q99MZ8	0.06%	0.06%
LIM domain only 2	A0A0G2QC60		0.09%
Lipase	Q6IMY6	0.03%	0.04%
L-lactate dehydrogenase	B5DEN4	0.23%	
L-lactate dehydrogenase A chain	P04642		0.27%
LOC367586 protein	Q5M7V3	0.33%	0.31%
LOC684097 protein	B0BMY2		0.07%

Long-chain-fatty-acid--CoA ligase 3	Q63151	0.02%	0.02%
LRRGT00182	Q6QI26		0.06%
LRRGT00192	Q6QI16	0.03%	
Lumican	P51886	0.14%	0.15%
Lymphocyte cytosolic protein 1	Q5XI38	0.25%	0.31%
Lymphocyte specific 1, isoform CRA_a	Q4QQV6	0.03%	0.04%
Lysosome membrane protein 2	P27615	0.03%	0.05%
Lysosome-associated membrane glycoprotein 2	P17046	0.02%	
Lysozyme C-1	P00697		0.14%
Macrophage erythroblast attacher	Q5RKJ1		0.03%
Macrophage metalloelastase	Q63341		0.05%
Macrophage-capping protein	Q6AYC4	0.17%	0.14%
Major vault protein	Q62667	0.03%	0.02%
Malate dehydrogenase, cytoplasmic	O88989	0.04%	0.07%
Malate dehydrogenase, mitochondrial	P04636	0.19%	0.20%
Mannose receptor, C type 1	D3ZD31	0.01%	
Mannosyl-oligosaccharide glucosidase	G3V743	0.02%	
MAPK-regulated co-repressor-interacting protein 2	D3ZM07	0.10%	
Mast cell protease 1	P09650	0.09%	0.10%
Membrane-associated guanylate kinase, WW and PDZ domain-containing protein 1	Q4L1J4	0.02%	0.03%
Mevalonate kinase	P17256	0.04%	0.05%
MGA, MAX dimerization protein	D3ZJB5	0.01%	
MHC class I protein	Q861Q3		0.03%
Microtubule-actin cross-linking factor 1	A0A0G2JU82	0.00%	0.00%
Mitochondrial-processing peptidase subunit alpha	P20069		0.02%
Moesin	A0A096MK30	0.26%	0.25%
Monocarboxylate transporter 4	O35910		0.02%
Multidrug resistance-associated protein 6	O88269	0.01%	0.01%
Multiple domain complement regulator 1	Q45NC2		0.00%
Murinoglobulin-1	Q03626	0.17%	0.20%
Murinoglobulin-2	Q6IE52	0.22%	0.33%
Myeloperoxidase	D3ZGE2	0.08%	0.14%
Myoferlin	A0A0G2K695	0.01%	0.01%
Myomegalin	Q9WUJ3	0.01%	0.01%
Myosin heavy chain 1	F1LRV9	0.25%	0.34%
Myosin heavy chain 14	F1LNF0	0.04%	0.03%

Myosin IF	D4A7X9		0.02%
Myosin light chain 1/3, skeletal muscle isoform	P02600	0.26%	0.18%
Myosin light chain kinase 3	E9PT87		0.03%
Myosin light polypeptide 6	A0A0G2K6J5	0.39%	0.47%
Myosin regulatory light chain 2, skeletal muscle isoform	P04466	0.32%	0.17%
Myosin regulatory light chain RLC-A	P13832	0.07%	
Myosin VC	F1M111		0.01%
Myosin XVIIIb	M0R6Z9	0.00%	
Myosin, heavy polypeptide 10, non-muscle, isoform CRA_b	G3V9Y1	0.05%	
Myosin, heavy polypeptide 9, non-muscle	G3V6P7	0.28%	0.26%
Myosin-11	A0A0G2K6S9	0.06%	0.06%
Myosin-3	P12847	0.09%	
Myosin-6	P02563	0.08%	0.09%
Myosin-7	P02564	0.08%	0.13%
Myotrophin	P62775		0.19%
Myristoylated alanine-rich C-kinase substrate	P30009	0.10%	0.06%
NADH dehydrogenase (Ubiquinone) 1 beta subcomplex, 11 (Predicted)	D4A7L4	0.10%	
NADH dehydrogenase [ubiquinone] iron-sulfur protein 2, mitochondrial	Q641Y2		0.03%
NADH:ubiquinone oxidoreductase subunit A4	B2RZD6	0.10%	
NADH:ubiquinone oxidoreductase subunit B10	D4A0T0		0.05%
NADH-cytochrome b5 reductase 3	P20070	0.09%	
NaPi-2 beta	Q9Z322	0.03%	
Natural resistance-associated macrophage protein 1	P70553	0.02%	
Neuronatin	Q62649	0.20%	0.15%
Neutrophil cytosolic factor 2	R4I3Z7		0.02%
Neutrophilic granule protein	D3ZY96		0.20%
Niban-like protein 1	B4F7E8	0.02%	0.04%
Non imprinted in Prader-Willi/Angelman syndrome 1	F1M5J3	0.03%	
Non imprinted in Prader-Willi/Angelman syndrome 2	D3ZUV1		0.04%
Non-muscle caldesmon	Q62736	0.08%	
NPC intracellular cholesterol	F7FJQ3		0.07%

transporter 2			
Nucleolin	P13383		0.04%
Nucleolin-related protein NRP	Q9QZX1		0.03%
Nucleoside diphosphate kinase B	P19804	0.40%	0.21%
Olfactory receptor	M0R4G3	0.08%	0.07%
Ornithine aminotransferase, mitochondrial	P04182	0.04%	
Osteoglycin	D3ZVB7	0.13%	0.09%
p55 protein	Q5BK33	0.02%	0.02%
Palmitoyl-protein thioesterase 1	P45479	0.03%	
Paraspeckle component 1	A0A0G2JYN7	0.04%	
Patatin-like phospholipase domain containing 5 (Predicted)	D3ZXU1	0.02%	
PDZ domain-containing 11 (Fragment)	A0A096MJC5		0.17%
Pentaxin	H6X2W6	0.09%	0.18%
Peptidyl-prolyl cis-trans isomerase	Q6AYQ9		0.12%
Peptidyl-prolyl cis-trans isomerase A	P10111	0.42%	0.53%
Peptidyl-prolyl cis-trans isomerase B	P24368	0.19%	0.41%
Peptidyl-prolyl cis-trans isomerase FKBP1A	Q62658	0.11%	
Peptidyl-prolyl cis-trans isomerase FKBP9	Q66H94	0.04%	0.04%
Peptidylprolyl isomerase	Q5U2V1	0.15%	0.11%
Periostin	A0A097BW25	0.26%	0.14%
Peripherin	P21807		0.09%
Peroxidasin	A0A0G2JWB6	0.01%	
Peroxiredoxin 5, isoform CRA_c	A0A0G2JSS8	0.27%	
Peroxiredoxin-1	Q63716	0.42%	0.36%
Peroxiredoxin-2	A0A0G2JSH9	0.47%	0.36%
Peroxiredoxin-5, mitochondrial	Q9R063		0.17%
Phosphate carrier protein, mitochondrial	P16036	0.10%	0.06%
Phosphodiesterase	Q76KC5	0.01%	
Phosphoglycerate kinase 1	P16617	0.37%	0.41%
Phosphoglycerate mutase	Q6P6G4	0.09%	0.07%
Phosphoglycerate mutase 1	P25113	0.13%	0.15%
Phospholipase D3	Q5FVH2	0.05%	
Pinin, desmosome-associated protein	D3ZAY8		0.03%
Plasminogen	Q01177	0.12%	0.15%
Plasminogen activator inhibitor 1 RNA-binding protein	Q6AXS5	0.05%	
Plastin 3 (T-isoform), isoform CRA_a	F1LPK7		0.06%
Plastin-3	Q63598	0.11%	

Platelet factor 4	P06765		0.25%
Plectin	Q6S3A0	0.09%	0.08%
Poly(rC)-binding protein 4	D3ZCS3		0.03%
Polyadenylate-binding protein 1	A0A0G2JZS2	0.04%	
Polycystic kidney disease 1-like 2	M0R5G5	0.01%	0.01%
Polypeptide N-acetylgalactosaminyltransferase 13	Q6UE39	0.02%	
Polypeptide N-acetylgalactosaminyltransferase 5	O88422		0.01%
Polypyrimidine tract binding protein 1, isoform CRA_c	D3ZB30	0.05%	
Polyubiquitin (Fragment)	Q63654	0.25%	
PRA1 family protein	A0A0G2JTX2	0.08%	
Prelamin-A/C	P48679		0.23%
Pre-mRNA processing factor 8, isoform CRA_a	G3V6H2		0.01%
Pre-mRNA-splicing factor SYF1	Q99PK0	0.02%	0.04%
Procollagen-lysine,2-oxoglutarate 5-dioxygenase 2	Q811A3	0.07%	0.09%
Procollagen-proline, 2-oxoglutarate 4-dioxygenase (Proline 4-hydroxylase), alpha II polypeptide (Predicted), isoform CRA_a	D3ZGT6	0.02%	
Profilin-1	P62963	0.35%	0.67%
Progesterone receptor	Q63449		0.05%
Programmed cell death 6	G3V7W1	0.09%	
Programmed cell death 6-interacting protein	Q9QZA2		0.01%
Prohibitin	P67779	0.20%	0.23%
Prohibitin-2	A0A0G2KB63	0.08%	0.10%
Prolargin	Q9EQP5	0.06%	
Prolyl 4-hydroxylase subunit alpha-1	P54001	0.05%	0.02%
Prosaposin	F7EPE0		0.02%
Proteasome (Prosome, macropain) 26S subunit, non-ATPase, 12	Q5XIC6	0.02%	0.04%
Proteasome (Prosome, macropain) 26S subunit, non-ATPase, 14	Q4V8E2	0.04%	
Proteasome (Prosome, macropain) activator subunit 1	Q6P9V7	0.07%	
Proteasome activator complex subunit 1	Q63797		0.09%
Proteasome endopeptidase complex	A0A0G2K0D7	0.04%	
Proteasome subunit alpha type	Q6P505		0.20%
Proteasome subunit alpha type-1	P18420	0.10%	0.10%

Proteasome subunit alpha type-2	P17220	0.05%	0.06%
Proteasome subunit alpha type-3	P18422	0.06%	
Proteasome subunit beta type	A0A0G2JSL0	0.06%	
Proteasome subunit beta type-1	P18421	0.04%	
Protein AMBP	Q64240		0.03%
Protein disulfide-isomerase	P04785	0.69%	0.64%
Protein disulfide-isomerase A4	G3V6T7	0.08%	
Protein disulfide-isomerase A6	A0A0G2JSZ5	0.15%	0.24%
Protein FAM46B	B0BNK8	0.03%	0.02%
Protein kinase C and casein kinase substrate in neurons 2	Q6IRI3	0.02%	
Protein kinase C delta-binding protein	Q9Z1H9	0.07%	
Protein kinase C substrate 80K-H	B1WC34	0.04%	0.06%
Protein NDRG1	Q6JE36		0.06%
Protein phosphatase 2 (Formerly 2A), regulatory subunit A (PR 65), alpha isoform, isoform CRA_a	Q5XI34	0.03%	
Protein piccolo	Q9JKS6	0.00%	
Protein S100-A4	P05942	0.27%	0.15%
Protein S100-A9	P50116	0.22%	0.42%
Protein SEC13 homolog	Q5XFW8	0.05%	
Protein SGT1 homolog	B0BN85		0.04%
Protein transport protein Sec31A	A0A0G2K0X9	0.06%	0.06%
Protein Wnt	D3ZRW5	0.03%	
Prothrombin	G3V843		0.07%
Purine nucleoside phosphorylase	P85973	0.19%	0.10%
Putative uncharacterized protein RGD1308559_predicted	D3ZP60		0.02%
Pyruvate dehydrogenase E1 component subunit alpha	D4A5G8	0.05%	
Pyruvate kinase	A0A0G2JVG3	0.42%	0.22%
Pyruvate kinase PKM	P11980	0.28%	0.41%
Rab GDP dissociation inhibitor beta	P50399	0.09%	0.06%
RAB10, member RAS oncogene family	Q5RKJ9		0.10%
RAB14, member RAS oncogene family	B0BMW0		0.20%
RAB1A, member RAS oncogene family	E9PU16	0.13%	
RAB5C, member RAS oncogene family	B0BNK1	0.20%	
RAS protein activator-like 3	D3ZWW3		0.01%
Ras suppressor protein 1	D4A8F2	0.04%	0.06%
Ras-related protein Rab-11B	O35509	0.04%	
Ras-related protein Rab-14	P61107	0.11%	

Ras-related protein Rab-2A	F1LP82	0.08%	0.07%
Ras-related protein Rab-7a	P09527	0.14%	0.10%
Ras-related protein Rab-9A	Q99P75	0.04%	
Ras-related protein Rap-1b	Q62636	0.20%	0.16%
Rat apolipoprotein E protein	Q65ZS7	0.44%	
RCG20603	A0A0G2JSK1	0.33%	0.17%
RCG21066	D3ZJW6	0.11%	0.27%
RCG24055, isoform CRA_b	G3V6C1		0.03%
RCG25591, isoform CRA_a	B2RYD7	0.01%	
RCG25629, isoform CRA_a	A0A0G2JVN4		0.01%
RCG28930, isoform CRA_b	M0R3Z8	0.01%	
RCG31390	G3V9A3	0.21%	
RCG31562, isoform CRA_c	I6L9G6		0.08%
RCG32340, isoform CRA_a	Q5U2X9	0.01%	
RCG33981, isoform CRA_a	Q68FT8		0.04%
RCG39700, isoform CRA_d	A0A0H2UHP9	0.12%	
RCG43931	Q6AYF8	0.02%	
RCG43947	D3ZZC1		0.02%
RCG44762	D4A1K1		0.04%
RCG45259	M0R7B4	0.23%	
RCG45489, isoform CRA_a	Q5XI04	0.07%	0.14%
RCG45615, isoform CRA_a	B2RYU2	0.37%	
RCG55135, isoform CRA_b	G3V852	0.06%	0.06%
Receptor expression-enhancing protein 5	B2RZ37	0.05%	
Receptor of activated protein C kinase 1	P63245	0.23%	0.13%
Reticulon	A1L1I6		0.08%
Retinoid-inducible serine carboxypeptidase	Q920A6	0.08%	0.07%
Rho GDP-dissociation inhibitor 1	Q5XI73	0.15%	0.22%
RhoA (Fragment)	O35791	0.07%	
Rhophilin, Rho GTPase binding protein 2 (Predicted)	D4A8N7	0.02%	0.05%
Ribonuclease inhibitor	E2RUH2	0.02%	0.06%
Ribosomal protein L18 (Fragment)	Q0QEW8	0.21%	
Ribosomal protein S11	Q6PDV9	0.12%	
Ribosomal protein S2	O55215	0.40%	0.24%
Ribosome-binding protein 1	F1M853	0.13%	0.08%
Ring finger protein 6	D3ZRG6		0.02%
Rps16 protein (Fragment)	B0K038	0.15%	0.16%
S1 RNA-binding domain 1	D4A9B0		0.02%
SAR1 gene homolog A (S. cerevisiae),	Q6AY18	0.08%	

isoform CRA_b			
Sarcoplasmic/endoplasmic reticulum calcium ATPase 2	P11507	0.02%	0.02%
Sec61 translocon alpha 2 subunit	A0A0U1RRQ7	0.05%	
Septin-2	Q91Y81	0.07%	0.05%
Septin-8	B0BNF1	0.05%	
Serine (Or cysteine) peptidase inhibitor, clade C (Antithrombin), member 1	Q5M7T5	0.16%	0.28%
Serine (Or cysteine) proteinase inhibitor, clade A (Alpha-1 antiproteinase, antitrypsin), member 4	Q5M8C3	0.05%	0.05%
Serine (Or cysteine) proteinase inhibitor, clade H, member 1, isoform CRA_b	Q5RJR9	0.55%	0.24%
Serine protease HTRA1	Q9QZK5	0.07%	0.03%
Serine protease inhibitor	F1LM05	0.36%	0.38%
Serine protease inhibitor A3F-like	F1M8F5	0.08%	0.09%
Serine protease inhibitor A3L	P05544	0.25%	0.28%
Serine/threonine-protein kinase Chk1	B4F7C9	0.05%	0.04%
Serotransferrin	P12346	0.73%	0.83%
Serpin B5	P70564	0.05%	
Serpin family F member 2	F7FHF3	0.03%	
Serum albumin	P02770	3.26%	2.95%
Serum paraoxonase/arylesterase 1	P55159	0.09%	0.20%
SH3 domain binding glutamic acid-rich protein-like 3	B2RZ27	0.09%	
Sialate O-acetylesterase	P82450	0.03%	0.02%
Signal peptidase complex catalytic subunit SEC11A	P42667	0.16%	
Similar to Exocyst complex component 1 (Exocyst complex component Sec3)	M0R528	0.07%	
Similar to potassium channel tetramerisation domain-containing 12b	F1M1A6	0.15%	0.21%
Similar to RIKEN cDNA 1300017J02	A0A0G2K896	0.04%	
Similar to tropomyosin 1, embryonic fibroblast-rat, isoform CRA_c	Q5FVG5	0.18%	0.13%
Sister chromatid cohesion protein PDS5 homolog B	D3ZXE2		0.01%
Slit homolog 2 protein	F1MA79	0.01%	
Sn1-specific diacylglycerol lipase alpha	Q5YLM1	0.01%	
Snf2-related CREBBP activator protein	M0R750	0.01%	
Sodium- and chloride-dependent glycine transporter 1	P28572	0.02%	0.03%

Sodium channel modifier 1	D3ZSG1	0.05%	
Sodium/potassium-transporting ATPase subunit alpha-1	P06685	0.06%	0.08%
Solute carrier family 35 member F6	Q5RKH7	0.02%	
Solute carrier family 37 member 2	A0A0G2K6J4	0.03%	
Solute carrier family 43 member 1	F7FL53	0.02%	
Solute carrier family 7 member 13	Q5RKI7	0.02%	
Sorting nexin	B5DEY8	0.02%	
SP120	Q63555	0.05%	
SPARC	P16975	0.06%	
SPARC/osteonectin, cwcv and kazal-like domains proteoglycan 2	A0A0G2K946		0.04%
Spectrin alpha chain, non-erythrocytic 1	A0A0G2K1Y8		0.01%
Spectrin beta chain	Q6XDA0	0.05%	0.04%
Spectrin, alpha, erythrocytic 1	D4A678		0.01%
Sphingosine-1-phosphate lyase 1	Q8CHN6	0.02%	
Staphylococcal nuclease domain-containing protein 1	Q66X93	0.08%	0.06%
Stathmin-4	P63043	0.04%	
Storkhead box 2	D4A001		0.01%
Stress-70 protein, mitochondrial	F1M953	0.06%	0.06%
Striated muscle-specific serine/threonine-protein kinase	Q63638	0.00%	
Structural maintenance of chromosomes 5	A0A0G2K4T5		0.02%
Succinyl-CoA:3-ketoacid coenzyme A transferase 1, mitochondrial	B2GV06	0.03%	0.02%
Superoxide dismutase [Cu-Zn]	P07632		0.25%
Superoxide dismutase [Mn], mitochondrial	P07895	0.15%	
Synaptic vesicle membrane protein VAT-1 homolog	Q3MIE4	0.15%	0.09%
Syntaxin-3-like	D3ZUH2	0.05%	0.04%
TATA-box-binding protein-associated factor 15	B2RYG5		0.02%
T-complex protein 1 subunit beta	Q5XIM9	0.07%	0.08%
T-complex protein 1 subunit delta	Q7TPB1	0.10%	0.07%
T-complex protein 1 subunit gamma	Q6P502	0.06%	0.05%
T-complex protein 11-like protein 2	Q568Z0		0.02%
Tenascin C	B2LYI9	0.12%	0.10%
Tenascin N	D3ZK14	0.09%	0.07%
Tetratricopeptide repeat domain 8	B1WBT5	0.03%	
THAP domain-containing protein 1	Q5U208		0.06%

Thioredoxin	P11232	0.20%	0.25%
Thioredoxin domain-containing 16	D3ZQK4	0.01%	
Thioredoxin reductase 1, cytoplasmic	A0A0G2JUN7	0.04%	
Thioredoxin-like protein 1	Q920J4	0.06%	0.04%
Thrombospondin 1	A0A0G2JV24	0.07%	0.04%
Thrombospondin 2	D4A2G6	0.01%	
Thy-1 membrane glycoprotein	P01830	0.12%	
T-kininogen 1	P01048	0.16%	
Toll like receptor 7 (Fragment)	U5LJA3	0.02%	0.01%
TOM1-like protein 1	F1LM81	0.04%	0.02%
Transaldolase	Q9EQS0	0.13%	0.22%
Transcription intermediary factor 1-beta	O08629	0.02%	0.01%
Transcriptional activator protein Pur-beta	A0A0G2JUX5	0.04%	
Transforming growth factor, beta-induced	D4A8G5	0.16%	0.09%
Transgelin	P31232	0.26%	0.19%
Transgelin-2	Q5XFX0	0.10%	0.13%
Transitional endoplasmic reticulum ATPase	P46462	0.08%	0.07%
Transketolase	P50137	0.23%	0.17%
Translationally-controlled tumor protein	P63029	0.16%	0.21%
Translocator protein	P16257	0.07%	
Translocon-associated protein subunit delta	Q07984		0.06%
Transmembrane 9 superfamily member	A0A0G2KA25		0.03%
Transmembrane 9 superfamily member 2	Q66HG5	0.03%	
Transmembrane emp24 domain-containing protein 10	Q63584	0.11%	0.07%
Transmembrane emp24 domain-containing protein 2	Q63524	0.10%	0.10%
Transmembrane emp24 domain-containing protein 7	D3ZTX0	0.05%	
Transmembrane emp24 domain-containing protein 9	Q5I0E7	0.06%	
Transmembrane protein 200B	D3Z9B6		0.04%
Transthyretin	P02767	0.50%	0.58%
Trimethylguanosine synthase	P85107	0.03%	0.04%
Triosephosphate isomerase	P48500	0.24%	0.34%
TRK-fused gene protein	Q4R1A4	0.03%	0.04%
tRNA methyltransferase 10 homolog A	Q4KLI2	0.07%	0.09%

Tropomyosin alpha-3 chain	Q63610		0.30%
Tropomyosin alpha-4 chain	P09495	0.41%	0.32%
Troponin T, fast skeletal muscle	A0A0G2JSW6	0.04%	
Tryptophan--tRNA ligase, cytoplasmic	F8WFH8	0.02%	
Tubby-like protein	D3ZWB5	0.02%	
Tubulin alpha-1A chain	P68370	0.22%	
Tubulin beta chain	Q4QQV0		0.06%
Tubulin beta-4B chain	Q6P9T8	0.16%	
Tubulin beta-5 chain	P69897	0.23%	
Tumor protein p53-binding protein 1	F1M842	0.01%	
Tyrosine-protein kinase	Q6AXQ3	0.07%	0.04%
Tyrosine-protein phosphatase non-receptor type	Q499N7		0.02%
Ubiquitin carboxyl-terminal hydrolase 19	Q6J1Y9	0.01%	
Ubiquitin thioesterase OTUB1	B2RYG6	0.05%	
Ubiquitin-conjugating enzyme E2 N	Q9EQX9	0.08%	
Ubiquitin-like modifier-activating enzyme 1	Q5U300	0.06%	0.04%
Ubiquitinyl hydrolase 1	D3ZM59		0.05%
UDP-glucose:glycoprotein glucosyltransferase 1	Q9JLA3		0.01%
UDP-N-acetylglucosamine pyrophosphorylase 1-like 1	B5DEH4	0.02%	
Uncharacterized protein C3orf38 homolog	Q66H33		0.05%
Unconventional myosin-Ia (Fragment)	Q62774		0.01%
Unconventional myosin-Id	Q63357	0.02%	
Vacuolar protein sorting-associated protein 52 homolog	O55166		0.02%
Vasodilator-stimulated phosphoprotein	F7EWC1	0.02%	
Vesicle-associated membrane protein 2	P63045	0.15%	
Vimentin	P31000	0.97%	1.00%
Vinculin	P85972	0.09%	0.07%
Vitronectin	Q62905	0.10%	0.22%
Voltage-dependent anion-selective channel protein 1	Q9Z2L0	0.14%	
Voltage-dependent anion-selective channel protein 2	P81155	0.17%	0.16%
VPS35 retromer complex component	G3V8A5	0.02%	
V-type proton ATPase subunit a	G3V887	0.02%	0.02%
V-type proton ATPase subunit B, brain isoform	P62815	0.12%	0.13%

V-type proton ATPase subunit C 1	Q5FVI6	0.04%	
V-type proton ATPase subunit E 1	Q6PCU2	0.07%	
V-type proton ATPase subunit F	P50408		0.15%
V-type proton ATPase subunit G	B2GUV5		0.08%
WD repeat-containing protein 1	Q5RKI0	0.11%	0.14%
WD repeat-containing protein 7	Q9ERH3		0.01%
Widely-interspaced zinc finger motifs	D3ZQQ2		0.02%
Xaa-Pro dipeptidase	Q5I0D7	0.05%	0.02%
Xin actin-binding repeat-containing protein 2	Q71LX6		0.01%
Zinc finger CCCH type-containing 13	E9PSN4		0.01%
Zinc finger protein 318	F1M0H0	0.00%	
Zinc finger protein 592	D3ZJG8		0.01%

Table S7. The proteins related to interleukin-6.

Proteins	**Biological process**
60 kDa heat shock protein, mitochondrial	positive regulation of interleukin-6 secretion
Complement factor I	cellular response to interleukin-6
Serine protease inhibitor A3N	cellular response to interleukin-6
Cathelicidin antimicrobial peptide	positive regulation of interleukin-6 production
Protein Wnt	positive regulation of interleukin-6 production
Toll-like receptor 7	positive regulation of interleukin-6 production
Cofilin-1	cellular response to interleukin-6