Electronic Supplementary Information

Converting the personalized biomolecular corona of graphene oxide nanoflakes into a high-throughput diagnostic test for early cancer detection

Massimiliano Papi,[1#] Valentina Palmieri, [1#] Luca Digiacomo,[2] Francesca Giulimondi,[2] Sara Palchetti,[2] Gabriele Ciasca,[1] Giordano Perini,[1] Damiano Caputo,[3] Maria Cristina Cartillone,[3] Chiara Cascone,[3] Roberto Coppola, [3] Anna Laura Capriotti,[4] Aldo Laganà,[4] Daniela Pozzi, [2] Giulio Caracciolo[2*]

1   Institute of Physics, Fondazione Policlinico Universitario A. Gemelli, IRCCS - Università Cattolica del Sacro Cuore, Rome, Italy

2   Department of Molecular Medicine, Sapienza University of Rome, Viale Regina Elena 291,00161, Rome, Italy

3   University Campus-Biomedico di Roma, Via Alvaro del Portillo 200, 00128, Rome, Italy

4   Department of Chemistry, Sapienza University of Rome, P.le Aldo Moro 5, 00185, Rome, Italy

*Corresponding Author: giulio.caracciolo@uniroma1.it

[#] These authors contributed equally

TABLE S1. Clinical and demographic characteristics of pancreatic cancer patients.

Patients (n.)	35
Sex	
Male	21
Female	14
Median age (years)	71 (range 54-85)
cT1 N0 M0	2
cT2 N0 M0	7
cT2 N+ M0	6
cT2 N+ M+	2
cT3 N0 M0	2
cT3 N+ M0	4
cT4 N+ M0	6
cT4 N+ M+	6

TABLE S2. Clinical and demographic characteristics of healthy volunteers.

Patients (n.)	35
Sex	
Male	20
Female	15
Median age (years)	52 (range 41-85)
Diagnosis	
Cholelithiasis	20
Groin hernia	6
Colonic diverticular disease	2
Hemorrhoids	2
Lipoma	1
Mesenteric cystic	2
Incisional hernia	2

Figure S1. A representative topography image of few GO flakes on mica substrate obtained by Atomic Force Microscopy (AFM) (a) and a representative GO sheet height profile H (b).
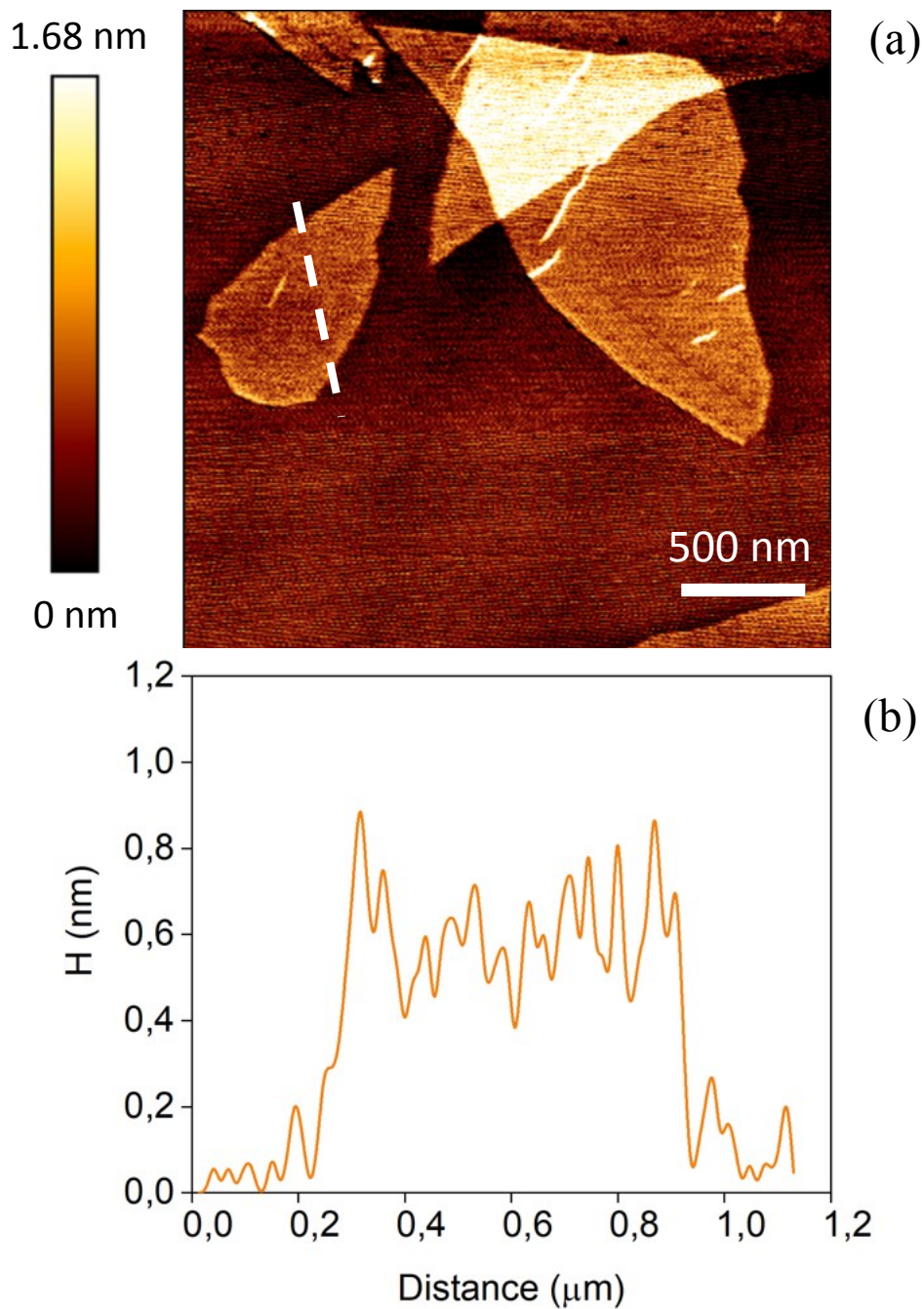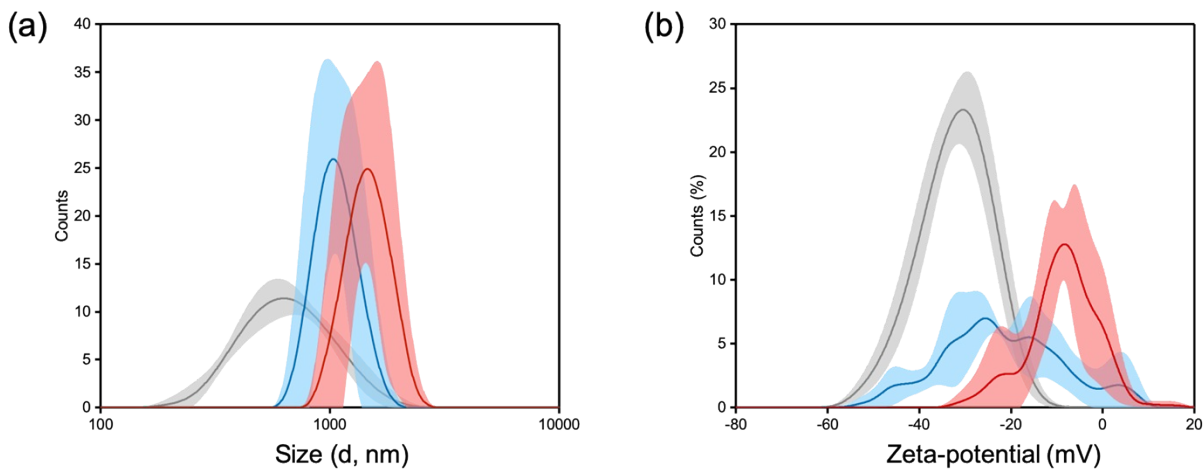
Figure S2. Size and Zeta-potential distributions of GO nanoflakes before (gray) and after incubation with human plasma from healthy subjects (blue profiles) and pancreatic cancer patients (red profiles). Shadows represent errors associated with experimental distributions.

Size (d. nm)	PdI	Z-potential (mV)
715.3 ±60.4	0.287	-32.4 ± 7.5
1080.0 ±174.6	0.286	-24.5 ± 12.0
1485.0 ±236.4	0.708	-15.5 ± 7.7

Figure S3. Cropped image of SDS-PAGE gel. As evident, GO nanoflakes do not migrate in the gel, but they are confined in the wells (indicated by arrows).

TABLE S3. Performance measures obtained with cutoff 0.25 using Area2 as sensitive biomarker and confidence intervals limits. PPV=Positive Predictive Value NPV= Negative Predictive Value.

	Value	Lower Limit	Upper Limit
Sensitivity	0.76	0.55	0.91
Specificity	0.80	0.59	0.93
PPV	0.79	0.58	0.92
NPV	0.77	0.56	0.92

TABLE S4. AUC values obtained after multivariate analysis of Areas testing several combinations.

	AUC
Area2	0.89
Area2+Area4	0.9
Area2+Area4+Area5	0.9
Area2+Area4+Area5+Area6	0.92
Area2+Area4+Area5+Area6+Area7	0.93
Area2+Area4+Area5+Area6+Area7+Area8	0.96

TABLE S5. Parameters obtained with multivariate ROC analysis.

β_0	β_1	β_2	β_3	β_4	β_5	β_6
140.5	-271.7	-58.1	-147.0	-170.3	-403.2	-294.9

TABLE S6. Relative protein abundance of proteins identified in the coronas of three healthy subjects and three pancreatic cancer patients. For each subject, the relative protein abundance is the average of three independent technical replicates.

	Gene name	Mol. weight [kDa]	Avg_pl	Healthy 1	Healthy 2	Healthy 3	Average	SD	Cancer 1	Cancer 2	Cancer 3	Average	SD
1	ACTA1;ACTG2;ACTA2;	42.051	5.1415	0.0000%	0.0003%	0.0000%	0.0001%	0.0002%	0.0008%	0.0008%	0.0009%	0.0008%	0.0001%
2	ACTB;ACTG1	41.736	5.2235	0.0138%	0.0118%	0.0126%	0.0127%	0.0010%	0.0335%	0.0292%	0.0409%	0.0346%	0.0059%
3	ARF1;ARF3	20.697	6.876	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
4	AFM	69.068	5.627	0.0866%	0.0806%	0.0787%	0.0819%	0.0041%	0.0757%	0.0699%	0.0712%	0.0723%	0.0030%
5	ORM1	23.511	4.803	1.0259%	0.8338%	0.9062%	0.9220%	0.0970%	0.8711%	0.9480%	0.8087%	0.8759%	0.0698%
6	ORM2	23.602	4.905	0.2262%	0.1928%	0.2489%	0.2226%	0.0282%	0.2565%	0.2900%	0.4388%	0.3284%	0.0970%
7	SERPINA3	47.65	5.255	0.5171%	0.5461%	0.5819%	0.5484%	0.0325%	0.5158%	0.4867%	0.4669%	0.4898%	0.0246%
8	SERPINA1	46.736	5.33	4.5546%	4.7503%	4.5180%	4.6076%	0.1249%	3.9469%	3.8004%	3.4903%	3.7459%	0.2331%
9	A1BG	54.253	5.596	0.2472%	0.2273%	0.2745%	0.2497%	0.0237%	0.2086%	0.1561%	0.2259%	0.1969%	0.0363%
10	SERPINF2	54.565	5.986	0.0428%	0.0493%	0.0444%	0.0455%	0.0034%	0.0365%	0.0356%	0.0292%	0.0337%	0.0040%
11	AHSG	39.34	5.437	0.5678%	0.5088%	0.4712%	0.5159%	0.0487%	0.4286%	0.4827%	0.4163%	0.4426%	0.0353%
12	A2M	163.29	6.149	1.2155%	1.2390%	1.2192%	1.2246%	0.0126%	0.9635%	0.9886%	0.9851%	0.9790%	0.0136%
13	ANG	16.55	9.836	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
14	AGT	53.154	6.003	0.0663%	0.0602%	0.0672%	0.0645%	0.0038%	0.0440%	0.0481%	0.0293%	0.0405%	0.0099%
15	ANXA2	38.604	7.566	0.0000%	0.0003%	0.0000%	0.0001%	0.0002%	0.0008%	0.0000%	0.0004%	0.0004%	0.0004%
16	ANO8	136.03	5.591	0.0053%	0.0035%	0.0049%	0.0045%	0.0009%	0.0101%	0.0100%	0.0077%	0.0092%	0.0014%
17	SERPINC1	52.602	6.399	0.3064%	0.3099%	0.3209%	0.3124%	0.0076%	0.3144%	0.3257%	0.3051%	0.3151%	0.0103%
18	APOA1	30.777	5.524	5.2846%	5.0547%	5.0100%	5.1164%	0.1473%	6.7152%	6.5027%	6.9524%	6.7234%	0.2249%
19	APOA2	11.175	6.438	2.2011%	1.9394%	1.9548%	2.0318%	0.1469%	2.1501%	1.8841%	2.4249%	2.1530%	0.2704%
20	APOA4	45.398	5.178	0.2301%	0.2159%	0.2390%	0.2283%	0.0117%	0.3718%	0.3741%	0.3698%	0.3719%	0.0022%
21	APOB	515.6	6.729	0.1609%	0.1562%	0.1634%	0.1602%	0.0037%	0.1081%	0.1119%	0.1045%	0.1082%	0.0037%
22	APOC1	9.3318	8.757	0.1933%	0.1735%	0.2297%	0.1988%	0.0285%	0.2039%	0.1650%	0.1784%	0.1824%	0.0198%
23	APOC2	11.284	4.499	0.1786%	0.1638%	0.1850%	0.1758%	0.0109%	0.1202%	0.1328%	0.0831%	0.1120%	0.0259%
24	APOC3	10.852	5.121	0.3460%	0.4422%	0.3457%	0.3779%	0.0556%	0.5899%	0.7106%	0.6114%	0.6373%	0.0644%
25	APOC4	14.553	8.885	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
26	APOD	21.275	4.932	0.1029%	0.0821%	0.1268%	0.1039%	0.0224%	0.1211%	0.1284%	0.0881%	0.1126%	0.0215%
27	APOE	36.154	5.544	0.3621%	0.3180%	0.4274%	0.3692%	0.0550%	0.1597%	0.1517%	0.1231%	0.1448%	0.0192%
28	APOF	35.399	5.378	0.0052%	0.0043%	0.0051%	0.0049%	0.0005%	0.0124%	0.0090%	0.0085%	0.0100%	0.0021%
29	APOL1	43.974	5.565	0.0037%	0.0085%	0.0086%	0.0069%	0.0028%	0.0114%	0.0138%	0.0171%	0.0141%	0.0029%
30	APOM	21.253	5.729	0.0259%	0.0238%	0.0296%	0.0264%	0.0029%	0.0530%	0.0530%	0.0384%	0.0482%	0.0084%
31	LPA	501.31	5.61	0.0005%	0.0006%	0.0006%	0.0006%	0.0001%	0.0007%	0.0008%	0.0005%	0.0006%	0.0002%
32	ATRN	158.54	7.026	0.0007%	0.0005%	0.0005%	0.0006%	0.0001%	0.0005%	0.0003%	0.0002%	0.0004%	0.0002%
33	APOH	38.298	7.777	0.1484%	0.1667%	0.1458%	0.1536%	0.0114%	0.1079%	0.1359%	0.1393%	0.1277%	0.0172%
34	B2M	13.714	6.212	0.0021%	0.0024%	0.0029%	0.0025%	0.0004%	0.0011%	0.0031%	0.0024%	0.0022%	0.0010%
35	BTD	61.132	5.935	0.0004%	0.0006%	0.0004%	0.0005%	0.0001%	0.0000%	0.0010%	0.0007%	0.0006%	0.0005%
36	CRP	67.033	7.007	0.0880%	0.0870%	0.0968%	0.0906%	0.0054%	0.0901%	0.0893%	0.0669%	0.0821%	0.0132%
37	C4BPA	28.357	4.933	0.0094%	0.0127%	0.0099%	0.0106%	0.0018%	0.0061%	0.0078%	0.0079%	0.0073%	0.0010%
38	C4BPB	15.892	4.157	0.0005%	0.0000%	0.0000%	0.0002%	0.0003%	0.0059%	0.0078%	0.0065%	0.0068%	0.0010%
39	CALML5	28.87	6.804	0.0027%	0.0027%	0.0030%	0.0028%	0.0002%	0.0063%	0.0054%	0.0059%	0.0059%	0.0004%
40	CA1	29.246	7.124	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
41	CA2	48.424	7.476	0.0002%	0.0014%	0.0004%	0.0007%	0.0006%	0.0000%	0.0003%	0.0003%	0.0002%	0.0002%
42	CPB2	52.286	7.022	0.0036%	0.0040%	0.0047%	0.0041%	0.0006%	0.0022%	0.0066%	0.0055%	0.0048%	0.0023%
43	CPN1	60.556	5.695	0.0112%	0.0113%	0.0097%	0.0107%	0.0009%	0.0095%	0.0085%	0.0071%	0.0084%	0.0012%
44	CPN2	38.087	5.203	0.0166%	0.0197%	0.0221%	0.0195%	0.0028%	0.0290%	0.0291%	0.0219%	0.0267%	0.0041%
45	CD5L	122.2	5.443	0.2367%	0.1987%	0.2420%	0.2258%	0.0236%	0.1307%	0.1444%	0.1529%	0.1426%	0.0112%
46	CP	52.494	5.973	0.1598%	0.1776%	0.1690%	0.1688%	0.0089%	0.1482%	0.1309%	0.1335%	0.1375%	0.0094%
47	CLU	51.778	5.251	0.0000%	0.0010%	0.0011%	0.0007%	0.0006%	0.0012%	0.0019%	0.0013%	0.0015%	0.0004%
48	F9	251.7	5.759	0.0002%	0.0002%	0.0003%	0.0002%	0.0000%	0.0002%	0.0003%	0.0002%	0.0002%	0.0001%
49	F5	70.108	7.902	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0003%	0.0000%	0.0001%	0.0001%	0.0001%
50	F11	67.791	7.533	0.0112%	0.0095%	0.0120%	0.0109%	0.0013%	0.0107%	0.0098%	0.0094%	0.0099%	0.0007%
51	F12	75.51	6.075	0.0017%	0.0021%	0.0017%	0.0018%	0.0002%	0.0000%	0.0013%	0.0016%	0.0010%	0.0009%
52	F13B	18.502	7.966	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
53	CFL1	26.016	9.236	0.0074%	0.0063%	0.0062%	0.0067%	0.0006%	0.0080%	0.0005%	0.0066%	0.0051%	0.0040%
54	C1QA	26.721	8.609	0.0394%	0.0428%	0.0447%	0.0423%	0.0027%	0.0586%	0.0528%	0.0499%	0.0538%	0.0044%
55	C1QB	25.773	8.318	0.0624%	0.0612%	0.0688%	0.0641%	0.0041%	0.0446%	0.0582%	0.0561%	0.0530%	0.0073%
56	C1QC	80.118	5.894	0.0054%	0.0052%	0.0060%	0.0055%	0.0004%	0.0053%	0.0036%	0.0033%	0.0041%	0.0011%
57	C1R	76.684	4.713	0.0134%	0.0123%	0.0136%	0.0131%	0.0007%	0.0142%	0.0131%	0.0123%	0.0132%	0.0009%
58	C1S	83.267	7.129	0.0120%	0.0129%	0.0133%	0.0127%	0.0006%	0.0085%	0.0087%	0.0085%	0.0086%	0.0001%
59	C2	187.15	6.098	1.1828%	1.1908%	1.1915%	1.1884%	0.0048%	0.9161%	0.9730%	0.9479%	0.9456%	0.0285%
60	C3	192.78	6.747	0.0141%	0.0143%	0.0149%	0.0144%	0.0004%	0.0092%	0.0102%	0.0095%	0.0097%	0.0005%
61	C4A	192.75	6.949	0.2879%	0.2515%	0.2705%	0.2700%	0.0182%	0.2032%	0.1979%	0.2028%	0.2013%	0.0030%
62	C4B;C4B_2	188.3	6.21	0.0269%	0.0244%	0.0260%	0.0257%	0.0013%	0.0196%	0.0176%	0.0208%	0.0194%	0.0016%
63	C5	104.79	6.418	0.0100%	0.0113%	0.0113%	0.0109%	0.0008%	0.0075%	0.0059%	0.0079%	0.0071%	0.0010%
64	C6	93.517	6.146	0.0141%	0.0143%	0.0159%	0.0148%	0.0010%	0.0108%	0.0102%	0.0128%	0.0113%	0.0014%
65	C7	65.163	6.124	0.0098%	0.0073%	0.0115%	0.0095%	0.0021%	0.0123%	0.0112%	0.0079%	0.0105%	0.0023%

#	Gene											
66	C8A	67.046	7.924	0.0065%	0.0049%	0.0074%	0.0063%	0.0013%	0.0045%	0.0032%	0.0037%	0.0038%	0.0007%
67	C8B	22.277	8.24	0.0509%	0.0487%	0.0615%	0.0537%	0.0068%	0.0404%	0.0391%	0.0443%	0.0413%	0.0027%
68	C8G	63.173	5.34	0.0400%	0.0410%	0.0461%	0.0424%	0.0033%	0.0332%	0.0368%	0.0336%	0.0345%	0.0019%
69	C9	85.532	6.727	0.1272%	0.1084%	0.1121%	0.1159%	0.0099%	0.0860%	0.0838%	0.0824%	0.0841%	0.0018%
70	CFB	27.033	7.488	0.0028%	0.0029%	0.0026%	0.0028%	0.0002%	0.0031%	0.0025%	0.0030%	0.0029%	0.0003%
71	CFD	139.09	6.269	0.1845%	0.1813%	0.1875%	0.1844%	0.0031%	0.1466%	0.1655%	0.1494%	0.1538%	0.0102%
72	CFH	37.65	7.146	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
73	CFHR1	30.65	6.059	0.0010%	0.0008%	0.0011%	0.0009%	0.0002%	0.0000%	0.0000%	0.0005%	0.0002%	0.0003%
74	CFHR2	65.75	7.281	0.0099%	0.0098%	0.0165%	0.0121%	0.0038%	0.0130%	0.0068%	0.0135%	0.0111%	0.0037%
75	CFI	45.14	5.735	0.0195%	0.0203%	0.0236%	0.0211%	0.0022%	0.0176%	0.0207%	0.0265%	0.0216%	0.0045%
76	SERPINA6	25.038	5.386	0.0036%	0.0034%	0.0047%	0.0039%	0.0007%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
77	CSTA	11.006	5.281	0.0095%	0.0098%	0.0100%	0.0098%	0.0003%	0.0154%	0.0218%	0.0170%	0.0181%	0.0033%
78	CST3	15.799	8.72	0.0000%	0.0000%	0.0007%	0.0002%	0.0004%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
79	DCD	11.284	6.227	0.2891%	0.2886%	0.2114%	0.2630%	0.0447%	0.4078%	0.3422%	0.2070%	0.3190%	0.1024%
80	DSP	331.77	6.501	0.0001%	0.0003%	0.0001%	0.0001%	0.0001%	0.0001%	0.0001%	0.0001%	0.0001%	0.0001%
81	EFEMP1	54.64	4.824	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
82	STOM	31.73	7.743	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
83	ECM1	60.673	6.36	0.0026%	0.0030%	0.0023%	0.0026%	0.0004%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
84	FERMT3	75.952	6.654	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
85	FGA	94.972	5.733	2.8739%	2.5968%	2.7946%	2.7551%	0.1427%	0.9487%	0.9079%	0.8366%	0.8977%	0.0567%
86	FGB	55.928	8.11	3.0830%	2.9746%	3.1531%	3.0702%	0.0900%	1.0615%	1.1802%	1.0912%	1.1110%	0.0618%
87	FGG	51.511	5.323	3.2052%	2.9000%	2.9466%	3.0172%	0.1644%	1.2040%	1.4585%	1.2745%	1.3123%	0.1314%
88	FN1	262.62	5.432	0.1331%	0.1291%	0.1374%	0.1332%	0.0042%	0.0203%	0.0206%	0.0195%	0.0201%	0.0006%
89	FBLN1	77.213	4.961	0.0038%	0.0027%	0.0029%	0.0031%	0.0006%	0.0020%	0.0004%	0.0009%	0.0011%	0.0008%
90	FCN2	34.001	6.437	0.0010%	0.0007%	0.0010%	0.0009%	0.0002%	0.0003%	0.0016%	0.0012%	0.0010%	0.0007%
91	FCN3	32.903	6.338	0.0121%	0.0169%	0.0155%	0.0149%	0.0024%	0.0101%	0.0100%	0.0051%	0.0084%	0.0028%
92	FLG	435.16	9.354	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0001%	0.0000%	0.0000%	0.0000%
93	FLG2	248.07	8.118	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
94	FLNA	280.74	5.769	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
95	LGALS3BP	65.33	4.999	0.0037%	0.0033%	0.0044%	0.0038%	0.0006%	0.0031%	0.0010%	0.0014%	0.0018%	0.0011%
96	GSN	85.696	5.98	0.0338%	0.0309%	0.0322%	0.0323%	0.0015%	0.0562%	0.0618%	0.0406%	0.0529%	0.0110%
97	GPX3	25.552	8.014	0.0030%	0.0045%	0.0042%	0.0039%	0.0008%	0.0020%	0.0016%	0.0015%	0.0017%	0.0003%
98	GAPDH	36.053	8.456	0.0015%	0.0009%	0.0010%	0.0011%	0.0005%	0.0004%	0.0004%	0.0010%	0.0006%	0.0003%
99	HP	45.205	6.253	3.8388%	3.5649%	3.6850%	3.6963%	0.1373%	2.7997%	3.1206%	2.9857%	2.9687%	0.1611%
100	HPR	39.029	6.76	0.0543%	0.0458%	0.0249%	0.0417%	0.0151%	0.0469%	0.0237%	0.0345%	0.0350%	0.0116%
101	HBA1;HBA2	15.257	8.863	1.4280%	1.2719%	1.2646%	1.3215%	0.0923%	1.8735%	1.9326%	1.6005%	1.8022%	0.1772%
102	HBB	15.998	6.956	1.1303%	1.2484%	1.3777%	1.2522%	0.1237%	2.8910%	2.8917%	2.7116%	2.8314%	0.1038%
103	HBD	16.055	7.932	0.0016%	0.0017%	0.0018%	0.0017%	0.0001%	0.0089%	0.0242%	0.0087%	0.0139%	0.0089%
104	HPX	51.676	6.669	0.3741%	0.4054%	0.3570%	0.3788%	0.0246%	0.5434%	0.5691%	0.5347%	0.5491%	0.0179%
105	SERPIND1	57.07	6.58	0.0533%	0.0513%	0.0541%	0.0529%	0.0014%	0.0688%	0.0675%	0.0677%	0.0680%	0.0007%
106	HGFAC	70.681	6.916	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
107	MST1;MST1L	80.319	7.542	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
108	HRG	59.578	7.189	0.0797%	0.0581%	0.0747%	0.0708%	0.0113%	0.1073%	0.0848%	0.0772%	0.0898%	0.0157%
109	HRNR	282.39	10.139	0.0022%	0.0035%	0.0036%	0.0031%	0.0008%	0.0016%	0.0019%	0.0018%	0.0017%	0.0002%
110	N/A	37.654	6.172	2.0836%	2.2621%	1.8793%	2.0750%	0.1915%	1.8194%	2.0129%	2.1369%	1.9898%	0.1600%
111	N/A	42.352	7.767	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
112	IGHA1	49.328	8.048	4.5539%	4.4286%	4.4350%	4.4725%	0.0706%	5.3901%	5.4700%	5.7109%	5.5237%	0.1670%
113	IGHD	35.9	7.38	2.4604%	2.6018%	2.4318%	2.4980%	0.0910%	2.5699%	2.0549%	2.0255%	2.2167%	0.3062%
114	IGHG1	41.287	7.711	0.4914%	0.4031%	0.4873%	0.4606%	0.0499%	0.3669%	0.3434%	0.3532%	0.3545%	0.0118%
115	IGHG2	35.94	7.095	0.1604%	0.1717%	0.1609%	0.1643%	0.0064%	0.1378%	0.1604%	0.1744%	0.1575%	0.0185%
116	IGHG3	49.439	6.44	0.6572%	0.6602%	0.6880%	0.6685%	0.0170%	0.7937%	0.8188%	0.7426%	0.7851%	0.0388%
117	IGHG4	12.82	8.912	0.0514%	0.0234%	0.0320%	0.0356%	0.0143%	0.0373%	0.0289%	0.0295%	0.0319%	0.0047%
118	IGHM	13.008	8.983	0.0461%	0.0324%	0.0398%	0.0394%	0.0068%	0.0471%	0.0437%	0.0255%	0.0388%	0.0116%
119	IGHV1-18	13.182	8.192	0.0278%	0.0331%	0.0279%	0.0296%	0.0030%	0.0131%	0.0239%	0.0218%	0.0196%	0.0057%
120	IGHV1-69D;IGHV1-46;	13.231	8.53	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
121	IGHV2-26	12.506	6.345	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
122	IGHV2-5	12.926	8.591	0.0652%	0.0514%	0.0579%	0.0582%	0.0069%	0.0780%	0.0855%	0.0723%	0.0786%	0.0066%
123	IGHV3-13	12.943	8.968	0.1185%	0.1625%	0.1546%	0.1452%	0.0235%	0.1433%	0.1893%	0.2036%	0.1788%	0.0315%
124	IGHV3-15	12.947	8.9625	0.2975%	0.2681%	0.2772%	0.2809%	0.0150%	0.3358%	0.3503%	0.3214%	0.3358%	0.0145%
125	IGHV3-21;IGHV3-7;IGH	13.056	8.594	0.0136%	0.0150%	0.0126%	0.0137%	0.0012%	0.0145%	0.0129%	0.0117%	0.0130%	0.0014%
126	IGHV3-23;IGHV3-30;IG	12.891	7.709	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0021%	0.0015%	0.0012%	0.0011%
127	IGHV3-49	12.822	7.704	0.0000%	0.0000%	0.0161%	0.0054%	0.0093%	0.0000%	0.0000%	0.0026%	0.0009%	0.0015%
128	IGHV3-64	13.203	7.71	0.0177%	0.0141%	0.0150%	0.0156%	0.0019%	0.0256%	0.0242%	0.0111%	0.0203%	0.0080%
129	IGHV3-64D	12.839	8.641	0.0208%	0.0152%	0.0194%	0.0185%	0.0029%	0.0259%	0.0284%	0.0174%	0.0239%	0.0058%
130	IGHV3-72	13.017	7.035	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%

#	Name												
131	IGHV3-74	13.124	9.43	0.0172%	0.0167%	0.0170%	0.0170%	0.0002%	0.0000%	0.0000%	0.0102%	0.0034%	0.0059%
132	IGHV3-9;IGHV3-43D	13.815	8.2965	0.0187%	0.0171%	0.0171%	0.0176%	0.0009%	0.0324%	0.0424%	0.0289%	0.0346%	0.0070%
133	IGHV4-28	12.674	8.167	0.0355%	0.0337%	0.0333%	0.0342%	0.0012%	0.0248%	0.0245%	0.0198%	0.0230%	0.0028%
134	IGHV4-39;IGHV4-59;IG	13.481	9.337	0.0248%	0.0252%	0.0354%	0.0285%	0.0060%	0.0359%	0.0428%	0.0351%	0.0379%	0.0043%
135	IGHV5-51	18.098	4.964	0.1098%	0.1196%	0.1124%	0.1139%	0.0051%	0.1341%	0.1361%	0.1007%	0.1236%	0.0199%
136	IGHV6-1	11.765	5.599	1.7298%	2.4431%	1.2021%	1.7917%	0.6228%	2.4008%	1.9232%	2.4048%	2.2429%	0.2769%
137	JCHAIN	12.618	8.423	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
138	IGKC	12.778	8.98	0.0132%	0.0186%	0.0209%	0.0175%	0.0039%	0.0089%	0.0120%	0.0084%	0.0098%	0.0019%
139	N/A	12.711	8.182	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
140	IGKV1-16	12.737	9.296	0.0226%	0.0292%	0.0283%	0.0267%	0.0035%	0.0291%	0.0335%	0.0156%	0.0261%	0.0093%
141	IGKV1-17	12.781	8.163	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
142	IGKV1-27	12.537	8.609	0.0033%	0.0019%	0.0017%	0.0023%	0.0008%	0.0024%	0.0000%	0.0000%	0.0008%	0.0014%
143	IGKV1-39;IGKV1D-39	12.848	5.326	0.0240%	0.0220%	0.0289%	0.0250%	0.0035%	0.0277%	0.0297%	0.0301%	0.0292%	0.0012%
144	IGKV1-5	13.079	8.523	0.0110%	0.0115%	0.0152%	0.0126%	0.0023%	0.0141%	0.0179%	0.0156%	0.0159%	0.0019%
145	IGKV1-8;IGKV1-9	13.185	9.388	0.0308%	0.0252%	0.0272%	0.0277%	0.0028%	0.0042%	0.0032%	0.0048%	0.0041%	0.0008%
146	IGKV1D-33;IGKV1-33	12.957	5.621	0.1945%	0.1974%	0.2173%	0.2031%	0.0124%	0.3640%	0.3174%	0.2467%	0.3094%	0.0590%
147	IGKV2-24	12.625	4.875	0.2379%	0.1939%	0.2685%	0.2334%	0.0375%	0.2420%	0.2550%	0.1966%	0.2312%	0.0307%
148	IGKV2-30	12.496	9.015	0.1692%	0.1104%	0.2214%	0.1670%	0.0556%	0.3044%	0.2719%	0.2446%	0.2736%	0.0300%
149	IGKV2D-28;IGKV2-29;I	12.557	9.367	0.2270%	0.2202%	0.2534%	0.2336%	0.0175%	0.2682%	0.2803%	0.2323%	0.2603%	0.0250%
150	IGKV3-11;IGKV3D-11	12.534	5.007	0.0186%	0.0196%	0.0220%	0.0201%	0.0018%	0.0265%	0.0238%	0.0229%	0.0244%	0.0018%
151	IGKV3-15	13.38	4.945	0.0494%	0.0515%	0.0502%	0.0504%	0.0011%	0.0432%	0.0626%	0.0609%	0.0556%	0.0107%
152	IGKV3-20	12.34	7.041	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
153	IGKV3D-15	22.83	8.2545	1.1381%	1.2684%	1.4158%	1.2741%	0.1390%	1.0805%	1.2062%	1.2409%	1.1759%	0.0844%
154	IGKV4-1	11.265	NaN	1.4646%	1.4379%	1.8244%	1.5756%	0.2159%	1.4026%	1.5546%	1.6820%	1.5464%	0.1399%
155	IGKV6D-21	11.253	8.19	0.0092%	0.0130%	0.0156%	0.0126%	0.0032%	0.0063%	0.0074%	0.0070%	0.0069%	0.0006%
156	IGLC1;IGLL5	12.301	9.457	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
157	IGLC2;IGLC3	12.283	6.946	0.0260%	0.0350%	0.0610%	0.0407%	0.0182%	0.0696%	0.0686%	0.0757%	0.0713%	0.0039%
158	IGLC7	12.249	7.897	0.0424%	0.0674%	0.0422%	0.0507%	0.0145%	0.0439%	0.0498%	0.0422%	0.0453%	0.0040%
159	IGLV1-40	12.412	5.602	0.0041%	0.0033%	0.0044%	0.0040%	0.0006%	0.0019%	0.0025%	0.0000%	0.0015%	0.0013%
160	IGLV1-47;IGLV1-44	11.893	8.585	0.0006%	0.0000%	0.0000%	0.0002%	0.0004%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
161	IGLV1-51	12.441	4.575	0.0634%	0.0680%	0.0767%	0.0694%	0.0067%	0.0458%	0.0482%	0.0486%	0.0475%	0.0015%
162	IGLV2-18	12.466	4.43	0.0311%	0.0294%	0.0332%	0.0313%	0.0019%	0.0097%	0.0130%	0.0138%	0.0122%	0.0021%
163	IGLV2-23	12.042	6.187	0.0000%	0.0005%	0.0000%	0.0002%	0.0003%	0.0000%	0.0000%	0.0016%	0.0005%	0.0009%
164	IGLV3-10	12.446	4.836	0.0900%	0.0843%	0.0871%	0.0871%	0.0028%	0.1278%	0.1553%	0.1280%	0.1370%	0.0158%
165	IGLV3-16	12.332	7.096	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
166	IGLV3-19	12.773	6.173	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
167	IGLV3-21	13.394	7.7315	0.0017%	0.0018%	0.0021%	0.0019%	0.0002%	0.0008%	0.0009%	0.0011%	0.0009%	0.0002%
168	IGLV3-9	12.468	6.834	0.0517%	0.0460%	0.0344%	0.0440%	0.0088%	0.0132%	0.0151%	0.0155%	0.0146%	0.0012%
169	IGLV4-69	12.814	4.169	0.0226%	0.0155%	0.0271%	0.0217%	0.0058%	0.0296%	0.0333%	0.0263%	0.0297%	0.0035%
170	IGLV5-39;IGLV5-45	22.963	10.303	0.0000%	0.0006%	0.0005%	0.0004%	0.0003%	0.0009%	0.0000%	0.0000%	0.0003%	0.0005%
171	IGLV7-43;IGLV7-46	31.674	8.523	0.0000%	0.0004%	0.0000%	0.0001%	0.0002%	0.0000%	0.0019%	0.0013%	0.0011%	0.0010%
172	IGLV8-61	66.034	6.455	0.0048%	0.0053%	0.0028%	0.0043%	0.0013%	0.0042%	0.0051%	0.0070%	0.0054%	0.0014%
173	IGLL1	101.39	6.466	0.0931%	0.1004%	0.1045%	0.0993%	0.0058%	0.0896%	0.0983%	0.0863%	0.0914%	0.0062%
174	N/A	106.46	6.544	0.1508%	0.1384%	0.1417%	0.1436%	0.0064%	0.1274%	0.1080%	0.1080%	0.1144%	0.0112%
175	IGFBP3	99.848	5.475	0.0148%	0.0139%	0.0167%	0.0151%	0.0014%	0.0065%	0.0066%	0.0053%	0.0061%	0.0007%
176	IGFALS	103.36	6.667	0.1478%	0.1287%	0.1466%	0.1411%	0.0107%	0.1069%	0.1001%	0.0961%	0.1010%	0.0054%
177	ITIH1	81.744	5.836	0.0011%	0.0014%	0.0020%	0.0015%	0.0004%	0.0009%	0.0002%	0.0003%	0.0005%	0.0004%
178	ITIH2	48.541	7.524	0.0074%	0.0088%	0.0070%	0.0077%	0.0010%	0.0097%	0.0093%	0.0086%	0.0092%	0.0006%
179	ITIH3	59.51	5.017	0.4165%	0.4036%	0.4267%	0.4156%	0.0115%	0.4582%	0.3930%	0.3553%	0.4022%	0.0521%
180	ITIH4	51.621	4.955	0.0474%	0.0351%	0.0457%	0.0427%	0.0066%	0.0447%	0.0487%	0.0415%	0.0450%	0.0036%
181	JUP	51.267	4.848	0.0152%	0.0140%	0.0149%	0.0147%	0.0006%	0.0163%	0.0137%	0.0134%	0.0144%	0.0016%
182	SERPINA4	62.064	5.02	0.6829%	0.6750%	0.6721%	0.6767%	0.0056%	0.6657%	0.6543%	0.6149%	0.6450%	0.0267%
183	KRT10	53.5	5.449	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
184	KRT14	66.038	8.045	1.0225%	1.0182%	1.1267%	1.0558%	0.0614%	1.0097%	1.0317%	0.9833%	1.0082%	0.0242%
185	KRT16	65.432	7.888	0.2109%	0.2085%	0.2231%	0.2142%	0.0078%	0.2034%	0.1692%	0.1563%	0.1763%	0.0244%
186	KRT9	62.378	7.572	0.0251%	0.0234%	0.0252%	0.0246%	0.0010%	0.0260%	0.0263%	0.0187%	0.0236%	0.0043%
187	KRT83;KRT81;KRT85;K	60.044	7.857	0.0419%	0.0387%	0.0435%	0.0414%	0.0025%	0.0397%	0.0329%	0.0285%	0.0337%	0.0056%
188	KRT1	58.923	6.958	0.0011%	0.0006%	0.0012%	0.0010%	0.0003%	0.0021%	0.0025%	0.0018%	0.0021%	0.0004%
189	KRT2	71.957	6.475	0.0789%	0.0839%	0.1213%	0.0947%	0.0232%	0.0926%	0.0887%	0.0760%	0.0858%	0.0087%
190	KRT5	38.177	6.612	0.1088%	0.1296%	0.1266%	0.1217%	0.0112%	0.0540%	0.0540%	0.0357%	0.0479%	0.0105%
191	KRT6A;KRT6C	19.25	5.328	0.0008%	0.0000%	0.0007%	0.0005%	0.0004%	0.0022%	0.0025%	0.0023%	0.0023%	0.0002%
192	KRT74;KRT73;KRT72	53.383	6.387	0.0063%	0.0081%	0.0050%	0.0065%	0.0016%	0.0029%	0.0025%	0.0028%	0.0027%	0.0002%
193	KNG1	38.429	6.294	0.0097%	0.0145%	0.0148%	0.0130%	0.0029%	0.0137%	0.0125%	0.0124%	0.0129%	0.0007%
194	LRG1	16.537	9.165	0.0026%	0.0032%	0.0031%	0.0030%	0.0003%	0.0000%	0.0000%	0.0007%	0.0002%	0.0004%
195	LCN1	26.143	5.27	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%

196	LBP	69.521	8.474	0.0030%	0.0026%	0.0036%	0.0031%	0.0005%	0.0049%	0.0054%	0.0034%	0.0046%	0.0011%
197	LUM	40.076	5.922	0.0039%	0.0043%	0.0026%	0.0036%	0.0009%	0.0020%	0.0013%	0.0017%	0.0017%	0.0003%
198	LYZ	16.93	4.416	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
199	MBL2	226.53	5.402	0.0002%	0.0001%	0.0001%	0.0001%	0.0001%	0.0003%	0.0004%	0.0003%	0.0003%	0.0000%
200	MMP16	62.216	7.262	0.0150%	0.0176%	0.0150%	0.0159%	0.0015%	0.0153%	0.0170%	0.0199%	0.0174%	0.0023%
201	CD14	10.245	6.196	0.0000%	0.0042%	0.0000%	0.0014%	0.0024%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
202	MYL6	36.071	6.697	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
203	MYH9	21.892	6.8495	0.0026%	0.0039%	0.0023%	0.0030%	0.0009%	0.0063%	0.0020%	0.0050%	0.0044%	0.0022%
204	PGLYRP2	46.312	6.083	0.0217%	0.0191%	0.0167%	0.0191%	0.0025%	0.0247%	0.0320%	0.0314%	0.0294%	0.0041%
205	DEFA3;DEFA1;DEFA1B	71.369	8.015	0.0057%	0.0050%	0.0061%	0.0056%	0.0006%	0.0076%	0.0061%	0.0074%	0.0070%	0.0008%
206	PDLIM1	55.154	6.232	0.2203%	0.2138%	0.2234%	0.2192%	0.0049%	0.2088%	0.2024%	0.2007%	0.2040%	0.0043%
207	PRDX2;PRDX1	45.674	9.469	0.0008%	0.0009%	0.0009%	0.0009%	0.0001%	0.0015%	0.0004%	0.0023%	0.0014%	0.0010%
208	SERPINF1	90.568	6.939	0.1041%	0.1055%	0.1035%	0.1043%	0.0010%	0.1024%	0.0885%	0.0956%	0.0955%	0.0069%
209	KLKB1	13.894	8.799	0.0039%	0.0042%	0.0034%	0.0038%	0.0004%	0.0118%	0.0145%	0.0234%	0.0166%	0.0061%
210	SERPING1	10.845	8.877	0.0075%	0.0069%	0.0094%	0.0079%	0.0013%	0.0203%	0.0241%	0.0318%	0.0254%	0.0059%
211	SERPINA5	60.958	9.881	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
212	PLG	83.283	5.502	0.0034%	0.0027%	0.0030%	0.0030%	0.0004%	0.0005%	0.0000%	0.0000%	0.0002%	0.0003%
213	PPBP	15.054	8.196	0.0002%	0.0007%	0.0000%	0.0003%	0.0003%	0.0016%	0.0025%	0.0016%	0.0019%	0.0005%
214	PF4;PF4V1	16.572	7.864	0.0026%	0.0029%	0.0028%	0.0028%	0.0001%	0.0184%	0.0267%	0.0318%	0.0256%	0.0067%
215	GP5	51.276	7.697	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
216	PIGR	38.999	5.959	0.0921%	0.0899%	0.1025%	0.0948%	0.0067%	0.0849%	0.1032%	0.0942%	0.0941%	0.0091%
217	PFN1	10.575	5.957	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
218	PIP	10.18	5.238	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
219	CFP	10.834	6.715	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
220	AMBP	13.242	5.84	0.0035%	0.0116%	0.0087%	0.0080%	0.0041%	0.0173%	0.0203%	0.0205%	0.0194%	0.0018%
221	S100A12	50.706	8.286	0.0000%	0.0000%	0.0001%	0.0000%	0.0000%	0.0000%	0.0001%	0.0001%	0.0001%	0.0000%
222	S100A6	151.06	9.784	0.0001%	0.0003%	0.0002%	0.0002%	0.0001%	0.0000%	0.0003%	0.0004%	0.0002%	0.0002%
223	S100A8	70.036	5.618	0.1141%	0.1093%	0.1168%	0.1134%	0.0038%	0.1058%	0.1171%	0.1243%	0.1157%	0.0093%
224	S100A9	34.49	7.733	0.0073%	0.0057%	0.0072%	0.0067%	0.0009%	0.0054%	0.0045%	0.0034%	0.0044%	0.0010%
225	SERPINA10	29.117	5.583	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
226	PRG4	20.987	5.513	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0003%	0.0001%	0.0002%
227	F2	23.01	5.749	0.0498%	0.0430%	0.0518%	0.0482%	0.0046%	0.0528%	0.0541%	0.0333%	0.0467%	0.0116%
228	GULP1	24.337	8.189	0.0007%	0.0011%	0.0011%	0.0010%	0.0002%	0.0005%	0.0000%	0.0002%	0.0002%	0.0003%
229	KRT87P	43.173	7.68	0.0011%	0.0007%	0.0015%	0.0011%	0.0004%	0.0028%	0.0022%	0.0013%	0.0021%	0.0008%
230	RAP1B;RAP1A	77.063	6.795	1.9340%	1.9234%	2.0327%	1.9634%	0.0603%	2.1686%	2.2714%	2.1599%	2.2000%	0.0621%
231	RBP4	69.366	5.974	35.2375%	36.2679%	35.6684%	35.7246%	0.5175%	37.0151%	36.4787%	37.0480%	36.8473%	0.3196%
232	SPP2	13.532	6.481	0.0867%	0.0920%	0.0920%	0.0902%	0.0031%	0.0081%	0.0092%	0.0091%	0.0088%	0.0006%
233	SELENOP	14.746	9.206	0.0481%	0.0363%	0.0442%	0.0429%	0.0060%	0.0353%	0.0393%	0.0265%	0.0337%	0.0065%
234	TF	25.387	6.24	0.0559%	0.0501%	0.0387%	0.0482%	0.0088%	0.0563%	0.0505%	0.0465%	0.0511%	0.0049%
235	ALB	39.731	4.988	0.0714%	0.0730%	0.0714%	0.0719%	0.0009%	0.0997%	0.1209%	0.1225%	0.1144%	0.0127%
236	SAA1	43.779	6.383	0.0025%	0.0024%	0.0023%	0.0024%	0.0001%	0.0014%	0.0024%	0.0019%	0.0019%	0.0005%
237	SAA4	52.991	8.98	0.0190%	0.0242%	0.0082%	0.0171%	0.0082%	0.0605%	0.0504%	0.0484%	0.0531%	0.0065%
238	APCS	80.909	5.847	0.0016%	0.0012%	0.0021%	0.0016%	0.0005%	0.0025%	0.0027%	0.0020%	0.0024%	0.0004%
239	PON1	82.577	8.942	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
240	SHBG	60.54	6.698	0.0007%	0.0006%	0.0009%	0.0007%	0.0002%	0.0006%	0.0006%	0.0007%	0.0006%	0.0000%
241	SIGLEC16	127.57	6.969	0.0168%	0.0000%	0.0056%	0.0097%	0.0000%	0.0000%	0.0097%	0.0032%	0.0056%
242	SCLT1	269.76	5.805	0.0003%	0.0002%	0.0002%	0.0003%	0.0001%	0.0005%	0.0006%	0.0006%	0.0006%	0.0001%
243	QSOX1	57.034	5.351	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
244	SBSN	22.537	5.44	0.0084%	0.0059%	0.0068%	0.0070%	0.0013%	0.0264%	0.0102%	0.0182%	0.0183%	0.0081%
245	STXBP5	129.38	4.569	0.0002%	0.0002%	0.0003%	0.0002%	0.0000%	0.0005%	0.0006%	0.0005%	0.0005%	0.0001%
246	TCP11L1	46.324	6.002	0.0042%	0.0057%	0.0074%	0.0058%	0.0016%	0.0064%	0.0079%	0.0061%	0.0068%	0.0010%
247	TLN1	74.68	7.476	0.0017%	0.0022%	0.0025%	0.0021%	0.0004%	0.0006%	0.0008%	0.0006%	0.0007%	0.0001%
248	CLEC3B	22.391	8.143	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0001%	0.0000%	0.0000%	0.0000%	0.0000%
249	THBS1	15.887	5.5	0.8741%	0.8682%	0.9584%	0.9003%	0.0505%	1.4872%	1.4924%	1.6273%	1.5356%	0.0794%
250	SERPINA7	32.528	7.251	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0033%	0.0025%	0.0029%	0.0029%	0.0004%
251	TGFBI	27.551	4.821	0.0000%	0.0000%	0.0001%	0.0000%	0.0001%	0.0002%	0.0001%	0.0000%	0.0001%	0.0001%
252	TAGLN2	50.326	4.942	0.0002%	0.0003%	0.0000%	0.0002%	0.0002%	0.0004%	0.0006%	0.0007%	0.0006%	0.0001%
253	TTR	38.213	9.094	0.0017%	0.0014%	0.0032%	0.0021%	0.0010%	0.0034%	0.0031%	0.0021%	0.0029%	0.0007%
254	PRSS3	52.917	5.302	0.4935%	0.4439%	0.4529%	0.4634%	0.0264%	0.4560%	0.4823%	0.4319%	0.4567%	0.0252%
255	TUBA1B;TUBA4A;TUB	52.071	5.951	0.0003%	0.0005%	0.0000%	0.0003%	0.0003%	0.0003%	0.0001%	0.0003%	0.0002%	0.0001%
256	TUBB1	75.122	5.41	0.0297%	0.0286%	0.0259%	0.0281%	0.0019%	0.0289%	0.0277%	0.0256%	0.0274%	0.0017%
257	ST3GAL6	54.305	5.519	0.1135%	0.1248%	0.1052%	0.1145%	0.0098%	0.0862%	0.0957%	0.0795%	0.0871%	0.0081%
258	GC	309.26	5.208	0.0038%	0.0033%	0.0034%	0.0035%	0.0003%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
259	PROC	34.258	5.763	0.0734%	0.0630%	0.0680%	0.0681%	0.0052%	0.0856%	0.0842%	0.0670%	0.0789%	0.0103%
260	PROS1	48.934	6.2	0.0671%	0.0521%	0.0744%	0.0646%	0.0114%	0.0670%	0.0653%	0.0656%	0.0660%	0.0009%
261	VTN	56.224	8.26	0.0079%	0.0075%	0.0088%	0.0081%	0.0007%	0.0060%	0.0045%	0.0054%	0.0053%	0.0007%
262	VWF	63.485	8.12	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
263	AZGP1	23.379	6.9	2.7306%	2.6560%	2.9209%	2.7691%	0.1366%	3.4176%	3.8881%	3.8738%	3.7265%	0.2676%