

Supporting Information

Immuno-modified superparamagnetic nanoparticles via host-guest interactions for high-purity capture and mild release of exosomes

Shuang Cai, Bin Luo, Peipei Jiang, Xiaoxi Zhou, Fang Lan, Qiangying Yi, Yao Wu**

National Engineering Research Center for Biomaterials, Sichuan University, Chengdu,
Sichuan 610064, P.R. China

*Corresponding author: E-mail: qyi@scu.edu.cn; wuyao@scu.edu.cn.

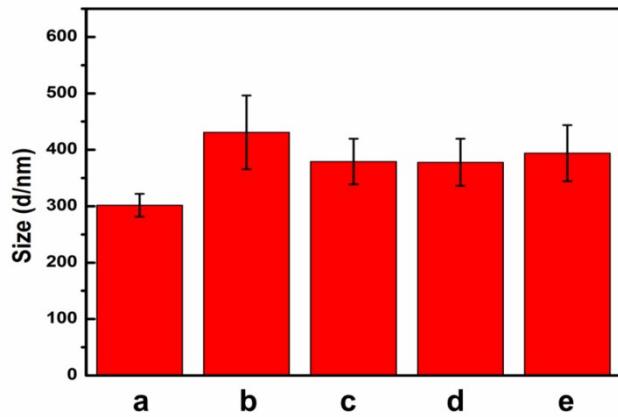


Fig. S1 The hydrodynamic diameter of SNPs (a), SNPs@PEI (b), SNPs@PEI-PAA (c), SNPs@PEI-PAA-AAB (d), and FS-NPs (e) performed by DLS.

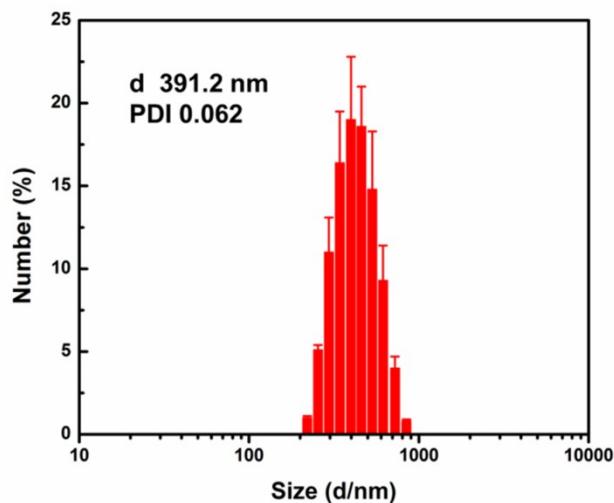


Fig. S2 The size distribution of of IS-NPs performed by DLS.

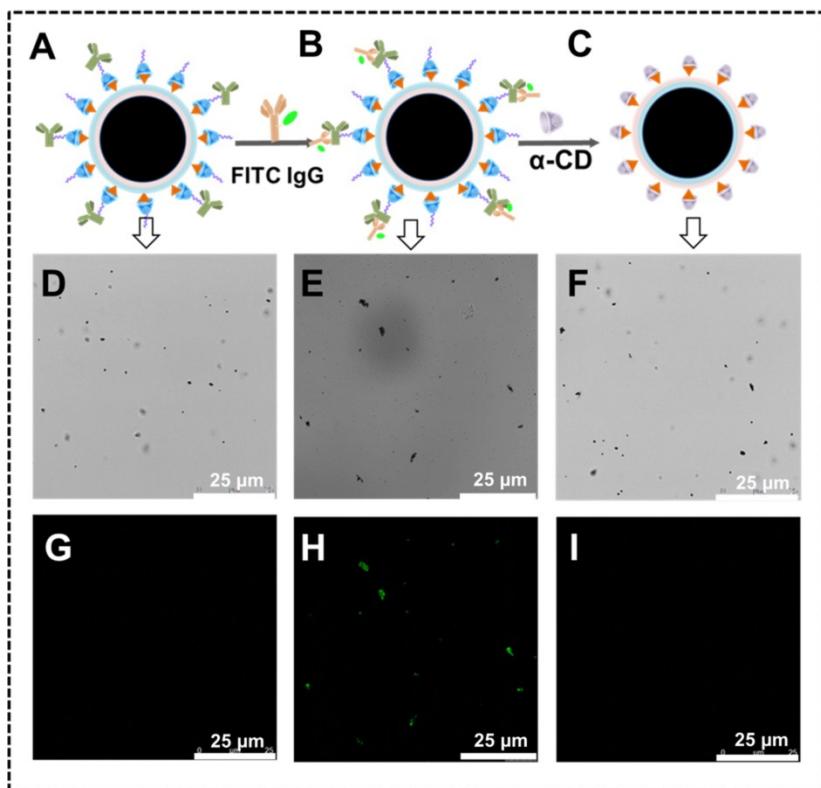


Fig. S3 Bright and fluorescence images of the IS-NPs (D, G), FITC-labeled goat anti-rabbit IgG (excitation 362 nm, emission 488 nm) modified IS-NPs (E, H), and FITC-labeled IS-NPs after elution (F, I).

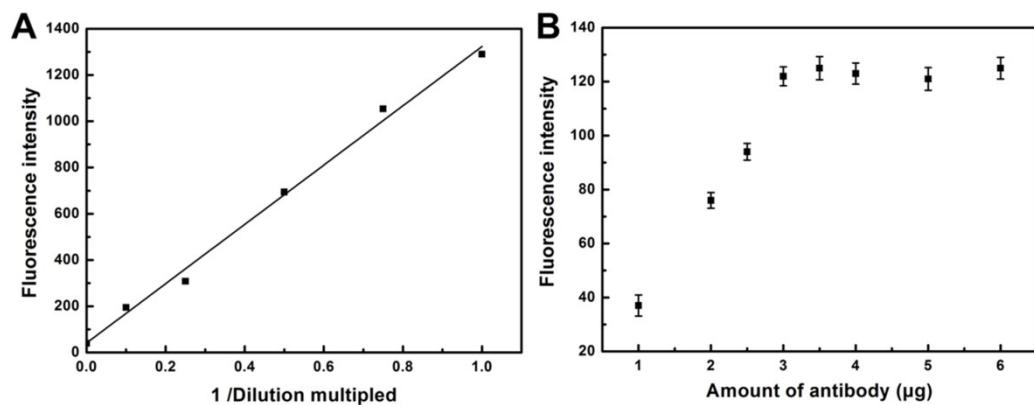


Fig.S4 (A) Standard curve of FITC-labeled rabbit IgG of different concentrations in the presence of BS-NPs. (B) Fluorescence intensity of IS-NPs (35 mg/ml) after incubation with different amount of anti-EXO9 and excessive FITC-labeled secondary antibody.

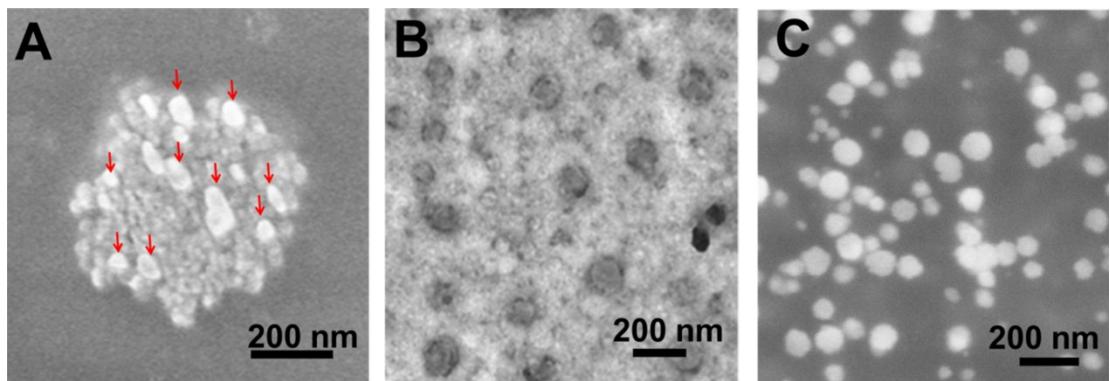


Fig. S5 (A) SEM image of exosomes size particles (red arrow) captured on IS-NPs. TEM (B) and SEM (C) images of the intact and well-dispersed exosomes isolated by IS-NPs.

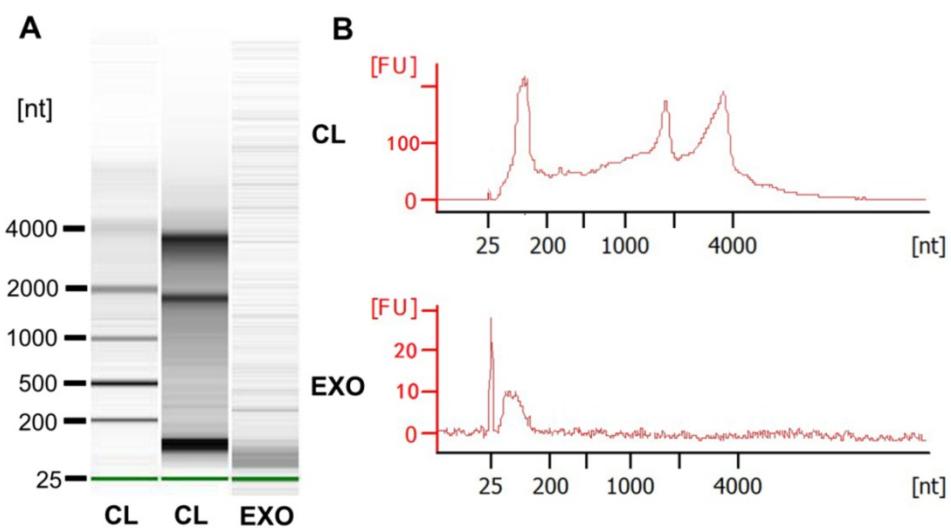


Fig. S6 (A) Gel-like image displaying RNA separated by size from cell lysate (CL) and the exosomes (EXO) captured by IS-NPs. (B) Electropherograms of RNA profiles from CL and EXO.(nt: nucleotide length, FU: fluorescent units).

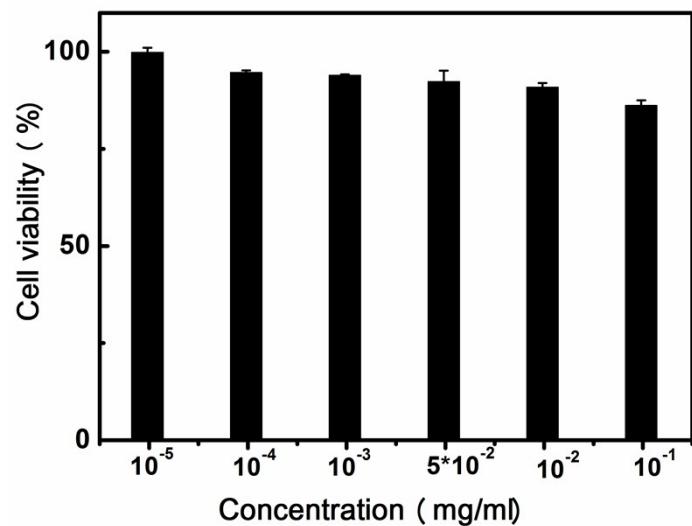


Fig. S7 The cell viability of 4T1 cells with FS-NPs examined by the CCK-8 assay.

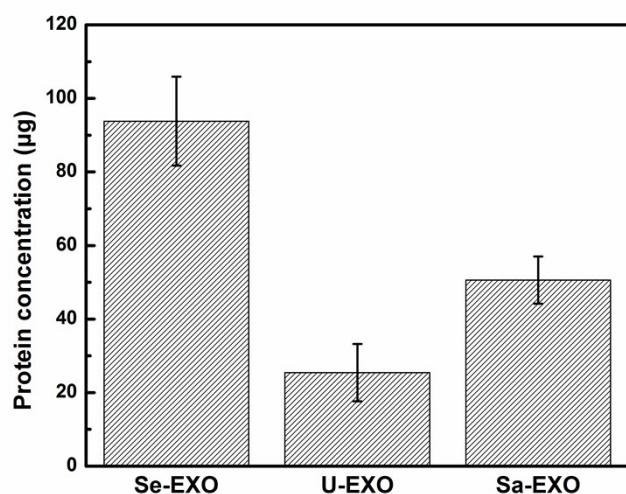


Fig. S8 The protein amount of captured exosomes from 1 ml body fluids (serum, urine, and saliva).

Table S1. Capture efficiency of IS-NPs in the samples containing exosomes with varied concentrations. The capture efficiency of IS-NPs was calculated according to the change of particle numbers before and the captured ones.

	I /mL	II /mL	III/mL	IV/mL	V/mL
Before	$1.25 \pm 0.13 \times 10^{11}$	$6.85 \pm 0.53 \times 10^{10}$	$7.52 \pm 0.64 \times 10^9$	$4.53 \pm 0.27 \times 10^8$	$4.30 \pm 0.21 \times 10^7$
After	$8.09 \pm 0.57 \times 10^9$	$8.46 \pm 0.63 \times 10^9$	$1.52 \pm 0.44 \times 10^9$	$9.11 \pm 1.02 \times 10^7$	$3.68 \pm 0.37 \times 10^6$
Captured	$1.01 \pm 0.11 \times 10^{11}$	$5.72 \pm 0.34 \times 10^{10}$	$6.19 \pm 0.71 \times 10^9$	$3.60 \pm 0.21 \times 10^8$	$3.49 \pm 0.14 \times 10^7$
Efficiency	$80.8 \pm 0.96\%$	$83.5 \pm 1.02\%$	$82.3 \pm 1.10\%$	$79.5 \pm 0.96\%$	$81.2 \pm 0.93\%$

Table S2. Mass spectrometry analysis of exosomes isolated by IS-NPs.

Accession	Description	Both in Vesiclepedia and Exocarta databases	Only in Vesiclepedia databases
Q9WV91	Prostaglandin F2 receptor negative regulator OS=Mus musculus GN=Ptgfrn PE=1 SV=2	Y	
Q9R1P4	Proteasome subunit alpha type-1 OS=Mus musculus GN=Psma1 PE=1 SV=1	Y	
Q9R1P3	Proteasome subunit beta type-2 OS=Mus musculus GN=Psmb2 PE=1 SV=1	Y	
Q9R0H5	Keratin, type II cytoskeletal 71 OS=Mus musculus GN=Krt71 PE=1 SV=1	Y	
Q9QWL7	Keratin, type I cytoskeletal 17 OS=Mus musculus GN=Krt17 PE=1 SV=3	Y	
Q9QUM9	Proteasome subunit alpha type-6 OS=Mus musculus GN=Psma6 PE=1 SV=1	Y	
Q9JIF0	Protein arginine N-methyltransferase 1 OS=Mus musculus GN=Prmt1 PE=1 SV=1	Y	
Q91XV3	Brain acid soluble protein 1 OS=Mus musculus GN=Basp1 PE=1 SV=3	Y	
Q8VDD5	Myosin-9 OS=Mus musculus GN=Myh9 PE=1 SV=4	Y	
Q7TPR4	Alpha-actinin-1 OS=Mus musculus GN=Actn1 PE=1 SV=1	Y	
Q6IFZ6	Keratin, type II cytoskeletal 1b OS=Mus musculus GN=Krt77 PE=1 SV=1	Y	
Q62470	Integrin alpha-3 OS=Mus musculus GN=Itga3 PE=1 SV=1	Y	
Q61781	Keratin, type I cytoskeletal 14 OS=Mus musculus GN=Krt14 PE=1 SV=2	Y	
Q61001	Laminin subunit alpha-5 OS=Mus musculus GN=Lama5 PE=1 SV=4	Y	
Q60972	Histone-binding protein RBBP4 OS=Mus musculus GN=Rbbp4 PE=1 SV=5	Y	
Q60692	Proteasome subunit beta type-6 OS=Mus musculus GN=Psmb6 PE=1 SV=3	Y	
Q5SS40	Putative uncharacterized protein OS=Mus musculus GN=Ywhae PE=1 SV=1	Y	
Q5SQB7	MCG68069 OS=Mus musculus GN=Npm1 PE=1 SV=1	Y	
Q5FWB7	Fructose-bisphosphate aldolase OS=Mus musculus GN=Aldoa PE=1 SV=1	Y	
Q5FW97	Enolase 1, alpha non-neuron OS=Mus musculus GN=EG433182 PE=1 SV=1	Y	
Q58EV4	Proteasome subunit alpha type OS=Mus musculus GN=Psma3 PE=1 SV=1	Y	
Q546G4	Albumin 1 OS=Mus musculus GN=Alb PE=1 SV=1	Y	

Q542X7	Chaperonin subunit 2 (Beta), isoform CRA_a OS=Mus musculus GN=Cct2 PE=1 SV=1	Y	
Q3ULT2	Actinin alpha 4 OS=Mus musculus GN=Actn4 PE=1 SV=1	Y	
Q3UL48	Putative uncharacterized protein OS=Mus musculus GN=Ezr PE=2 SV=1	Y	
Q3UBT1	Putative uncharacterized protein OS=Mus musculus GN=Ybx1 PE=1 SV=1	Y	
Q3UAD6	Heat shock protein 90kDa beta (Grp94), member 1 OS=Mus musculus GN=Hsp90b1 PE=1 SV=1	Y	
Q3U7Z6	Phosphoglycerate mutase OS=Mus musculus GN=Pgam1 PE=1 SV=1	Y	
Q3U4U6	T-complex protein 1 subunit gamma OS=Mus musculus GN=Cct3 PE=1 SV=1	Y	
Q3TVK3	Aspartyl aminopeptidase OS=Mus musculus GN=Dnpep PE=1 SV=1	Y	
Q3TF14	Adenosylhomocysteinase OS=Mus musculus GN=Ahcy PE=1 SV=1	Y	
Q32P04	Keratin 5 OS=Mus musculus GN=Krt5 PE=1 SV=2	Y	
Q01853	Transitional endoplasmic reticulum ATPase OS=Mus musculus GN=Vcp PE=1 SV=4	Y	
P99026	Proteasome subunit beta type-4 OS=Mus musculus GN=Psmb4 PE=1 SV=1	Y	
P70195	Proteasome subunit beta type-7 OS=Mus musculus GN=Psmb7 PE=1 SV=1	Y	
P68033	Actin, alpha cardiac muscle 1 OS=Mus musculus GN=Actc1 PE=1 SV=1	Y	
P63101	14-3-3 protein zeta/delta OS=Mus musculus GN=Ywhaz PE=1 SV=1	Y	
P63017	Heat shock cognate 71 kDa protein OS=Mus musculus GN=Hspa8 PE=1 SV=1	Y	
P60710	Actin, cytoplasmic 1 OS=Mus musculus GN=Actb PE=1 SV=1	Y	
P58252	Elongation factor 2 OS=Mus musculus GN=Eef2 PE=1 SV=2	Y	
P52480	Pyruvate kinase PKM OS=Mus musculus GN=Pkm PE=1 SV=4	Y	
P50446	Keratin, type II cytoskeletal 6A OS=Mus musculus GN=Krt6a PE=1 SV=3	Y	
P48036	Annexin A5 OS=Mus musculus GN=Anxa5 PE=1 SV=1	Y	
P40142	Transketolase OS=Mus musculus GN=Tkt PE=1 SV=1	Y	
P40124	Adenylyl cyclase-associated protein 1 OS=Mus musculus GN=Cap1 PE=1 SV=4	Y	
P37889	Fibulin-2 OS=Mus musculus GN=Fbln2 PE=1 SV=2	Y	
P35700	Peroxiredoxin-1 OS=Mus musculus GN=Prdx1 PE=1 SV=1	Y	
P27773	Protein disulfide-isomerase A3 OS=Mus musculus GN=Pdia3 PE=1 SV=2	Y	
P26041	Moesin OS=Mus musculus GN=Msn PE=1 SV=3	Y	
P20029	78 kDa glucose-regulated protein OS=Mus musculus GN=Hspa5 PE=1 SV=3	Y	
P19096	Fatty acid synthase OS=Mus musculus GN=Fasn PE=1 SV=2	Y	
P19001	Keratin, type I cytoskeletal 19 OS=Mus musculus GN=Krt19 PE=1 SV=1	Y	
P17751	Triosephosphate isomerase OS=Mus musculus GN=Tpi1 PE=1 SV=4	Y	
P17742	Peptidyl-prolyl cis-trans isomerase A OS=Mus musculus GN=Ppia PE=1 SV=2	Y	
P16627	Heat shock 70 kDa protein 1-like OS=Mus musculus GN=Hspa11 PE=1 SV=4	Y	
P16045	Galectin-1 OS=Mus musculus GN=Lgals1 PE=1 SV=3	Y	
P15532	Nucleoside diphosphate kinase A OS=Mus musculus GN=Nme1 PE=1 SV=1	Y	
P13020	Gelsolin OS=Mus musculus GN=Gsn PE=1 SV=3	Y	
P11679	Keratin, type II cytoskeletal 8 OS=Mus musculus GN=Krt8 PE=1 SV=4	Y	
P11499	Heat shock protein HSP 90-beta OS=Mus musculus GN=Hsp90ab1 PE=1 SV=3	Y	
P10518	Delta-aminolevulinic acid dehydratase OS=Mus musculus GN=Alad PE=1	Y	

	SV=1		
P09411	Phosphoglycerate kinase 1 OS=Mus musculus GN=Pgk1 PE=1 SV=4	Y	
P09405	Nucleolin OS=Mus musculus GN=Ncl PE=1 SV=2	Y	
P09103	Protein disulfide-isomerase OS=Mus musculus GN=P4hb PE=1 SV=2	Y	
P09055	Integrin beta-1 OS=Mus musculus GN=Itgb1 PE=1 SV=1	Y	
P08730	Keratin, type I cytoskeletal 13 OS=Mus musculus GN=Krt13 PE=1 SV=2	Y	
P07356	Annexin A2 OS=Mus musculus GN=Anxa2 PE=1 SV=2	Y	
P06745	Glucose-6-phosphate isomerase OS=Mus musculus GN=Gpi PE=1 SV=4	Y	
P05213	Tubulin alpha-1B chain OS=Mus musculus GN=Tuba1b PE=1 SV=2	Y	
P04104	Keratin, type II cytoskeletal 1 OS=Mus musculus GN=Krt1 PE=1 SV=4	Y	
P02535	Keratin, type I cytoskeletal 10 OS=Mus musculus GN=Krt10 PE=1 SV=3	Y	
P01027	Complement C3 OS=Mus musculus GN=C3 PE=1 SV=3	Y	
O55234	Proteasome subunit beta type-5 OS=Mus musculus GN=Psmb5 PE=1 SV=3	Y	
O35639	Annexin A3 OS=Mus musculus GN=Anxa3 PE=1 SV=4	Y	
O09061	Proteasome subunit beta type-1 OS=Mus musculus GN=Psmb1 PE=1 SV=1	Y	
O08807	Peroxiredoxin-4 OS=Mus musculus GN=Prdx4 PE=1 SV=1	Y	
M0QWP1	Agrin OS=Mus musculus GN=Agrn PE=1 SV=1	Y	
F8VQJ3	Laminin subunit gamma-1 OS=Mus musculus GN=Lamc1 PE=1 SV=1	Y	
B9EHN0	Ubiquitin-activating enzyme E1, Chr X OS=Mus musculus GN=Uba1 PE=1 SV=1	Y	
B2RTM0	Histone H4 OS=Mus musculus GN=Hist2h4 PE=1 SV=1	Y	
B1AQ77	Keratin 15, isoform CRA_a OS=Mus musculus GN=Krt15 PE=1 SV=1	Y	
A8IP69	14-3-3 protein gamma subtype OS=Mus musculus GN=Ywhag PE=1 SV=1	Y	
A6ZI44	Fructose-bisphosphate aldolase OS=Mus musculus GN=Aldoa PE=1 SV=1	Y	
A3KGU9	Spectrin alpha chain, non-erythrocytic 1 OS=Mus musculus GN=Sptan1 PE=1 SV=2	Y	
A0A1B0GSX0	L-lactate dehydrogenase OS=Mus musculus GN=Ldha PE=1 SV=1	Y	
A0A0R4J1E2	Elongation factor 1-delta OS=Mus musculus GN=Eef1d PE=1 SV=1	Y	
A0A0A0MQF6	Glyceraldehyde-3-phosphate dehydrogenase OS=Mus musculus GN=Gapdh PE=1 SV=1	Y	
A0A087WSN6	Fibronectin OS=Mus musculus GN=Fn1 PE=1 SV=1	Y	
A0A087WR50	Fibronectin OS=Mus musculus GN=Fn1 PE=1 SV=1	Y	
Q9CPY7	Cytosol aminopeptidase OS=Mus musculus GN=Lap3 PE=1 SV=3	N	
Q8VED5	Keratin, type II cytoskeletal 79 OS=Mus musculus GN=Krt79 PE=1 SV=2	N	Y
Q8R146	Acylamino-acid-releasing enzyme OS=Mus musculus GN=Apbeh PE=1 SV=3	N	
Q8BGZ7	Keratin, type II cytoskeletal 75 OS=Mus musculus GN=Krt75 PE=1 SV=1	N	
Q6NXH9	Keratin, type II cytoskeletal 73 OS=Mus musculus GN=Krt73 PE=1 SV=1	N	
Q6IRU2	Tropomyosin alpha-4 chain OS=Mus musculus GN=Tpm4 PE=1 SV=3	N	
Q6IFX2	Keratin, type I cytoskeletal 42 OS=Mus musculus GN=Krt42 PE=1 SV=1	N	
Q64727	Vinculin OS=Mus musculus GN=Vcl PE=1 SV=4	N	Y
Q60668	Heterogeneous nuclear ribonucleoprotein D0 OS=Mus musculus GN=Hnrnpd PE=1 SV=2	N	
Q3UXN3	Putative uncharacterized protein OS=Mus musculus GN=Cars PE=2 SV=1	N	

Q3UV17	Keratin, type II cytoskeletal 2 oral OS=Mus musculus GN=Krt76 PE=1 SV=1	N	
P48678	Prelamin-A/C OS=Mus musculus GN=Lmna PE=1 SV=2	N	
P21550	Beta-enolase OS=Mus musculus GN=Eno3 PE=1 SV=3	N	Y
O88990	Alpha-actinin-3 OS=Mus musculus GN=Actn3 PE=2 SV=1	N	

Table S3. Mass spectrometry analysis of exosomes isolated by UC method.

Accession	Description	Both in Vesiclepedia and Exocarta databases	Only in Vesiclepedia databases
A0A0R4J0E1	Fibrinogen-like protein 1 OS=Mus musculus GN=Fgl1 PE=1 SV=1	N	Y
E9PZD8	Ceruloplasmin OS=Mus musculus GN=Cp PE=1 SV=1	N	Y
O08710	Thyroglobulin OS=Mus musculus GN=Tg PE=1 SV=3	N	Y
P20918	Plasminogen OS=Mus musculus GN=Plg PE=1 SV=3	N	Y
P27659	60S ribosomal protein L3 OS=Mus musculus GN=Rpl3 PE=1 SV=3	N	Y
P29699	Alpha-2-HS-glycoprotein OS=Mus musculus GN=Ahsg PE=1 SV=1	N	Y
P47856	Glutamine--fructose-6-phosphate aminotransferase [isomerizing] 1 OS=Mus musculus GN=Gfpt1 PE=1 SV=3	N	Y
Q149C2	TRAF3-interacting protein 1 OS=Mus musculus GN=Traf3ip1 PE=1 SV=2	N	Y
Q3TJ94	Prothrombin OS=Mus musculus GN=F2 PE=1 SV=1	N	Y
Q6GQT1	Alpha-2-macroglobulin-P OS=Mus musculus GN=A2m PE=2 SV=2	N	Y
A0A0A0MQF6	Glyceraldehyde-3-phosphate dehydrogenase OS=Mus musculus GN=Gapdh PE=1 SV=1	Y	
A0A0R4J0I9	Low density lipoprotein receptor-related protein 1 OS=Mus musculus GN=Lrp1 PE=1 SV=1	Y	
A0A1B0GSX0	L-lactate dehydrogenase OS=Mus musculus GN=Ldha PE=1 SV=1	Y	
B1AQ77	Keratin 15, isoform CRA_a OS=Mus musculus GN=Krt15 PE=1 SV=1	Y	
B2RTM0	Histone H4 OS=Mus musculus GN=Hist2h4 PE=1 SV=1	Y	
E9PZ16	Basement membrane-specific heparan sulfate proteoglycan core protein OS=Mus musculus GN=Hspg2 PE=1 SV=1	Y	
E9Q1Z0	Keratin 90 OS=Mus musculus GN=Krt90 PE=1 SV=1	Y	
F8VQJ3	Laminin subunit gamma-1 OS=Mus musculus GN=Lamc1 PE=1 SV=1	Y	

G3X977	Inter-alpha trypsin inhibitor, heavy chain 2 OS=Mus musculus GN=Itih2 PE=1 SV=1	Y	
O88783	Coagulation factor V OS=Mus musculus GN=F5 PE=1 SV=1	Y	
P01027	Complement C3 OS=Mus musculus GN=C3 PE=1 SV=3	Y	
P02104	Hemoglobin subunit epsilon-Y2 OS=Mus musculus GN=Hbb-y PE=1 SV=2	Y	
P02535	Keratin, type I cytoskeletal 10 OS=Mus musculus GN=Krt10 PE=1 SV=3	Y	
P04104	Keratin, type II cytoskeletal 1 OS=Mus musculus GN=Krt1 PE=1 SV=4	Y	
P05213	Tubulin alpha-1B chain OS=Mus musculus GN=Tuba1b PE=1 SV=2	Y	
P05784	Keratin, type I cytoskeletal 18 OS=Mus musculus GN=Krt18 PE=1 SV=5	Y	
P07744	Keratin, type II cytoskeletal 4 OS=Mus musculus GN=Krt4 PE=1 SV=2	Y	
P08730	Keratin, type I cytoskeletal 13 OS=Mus musculus GN=Krt13 PE=1 SV=2	Y	
P09528	Ferritin heavy chain OS=Mus musculus GN=Fth1 PE=1 SV=2	Y	
P11276	Fibronectin OS=Mus musculus GN=Fn1 PE=1 SV=4	Y	
P11499	Heat shock protein HSP 90-beta OS=Mus musculus GN=Hsp90ab1 PE=1 SV=3	Y	
P11679	Keratin, type II cytoskeletal 8 OS=Mus musculus GN=Krt8 PE=1 SV=4	Y	
P13020	Gelsolin OS=Mus musculus GN=Gsn PE=1 SV=3	Y	
P17879	Heat shock 70 kDa protein 1B OS=Mus musculus GN=Hspa1b PE=1 SV=3	Y	
P19001	Keratin, type I cytoskeletal 19 OS=Mus musculus GN=Krt19 PE=1 SV=1	Y	
P20029	78 kDa glucose-regulated protein OS=Mus musculus GN=Hspa5 PE=1 SV=3	Y	
P27773	Protein disulfide-isomerase A3 OS=Mus musculus GN=Pdia3 PE=1 SV=2	Y	
P40240	CD9 antigen OS=Mus musculus GN=Cd9 PE=1 SV=2	Y	
P50446	Keratin, type II cytoskeletal 6A OS=Mus musculus GN=Krt6a PE=1 SV=3	Y	
P52480	Pyruvate kinase PKM OS=Mus musculus GN=Pkm PE=1 SV=4	Y	
P60710	Actin, cytoplasmic 1 OS=Mus musculus GN=Actb PE=1 SV=1	Y	
P63017	Heat shock cognate 71 kDa protein OS=Mus musculus GN=Hspa8 PE=1 SV=1	Y	

P63101	14-3-3 protein zeta/delta OS=Mus musculus GN=Ywhaz PE=1 SV=1	Y	
P68033	Actin, alpha cardiac muscle 1 OS=Mus musculus GN=Actc1 PE=1 SV=1	Y	
P68372	Tubulin beta-4B chain OS=Mus musculus GN=Tubb4b PE=1 SV=1	Y	
P97298	Pigment epithelium-derived factor OS=Mus musculus GN=Serpinf1 PE=1 SV=2	Y	
P98064	Mannan-binding lectin serine protease 1 OS=Mus musculus GN=Masp1 PE=1 SV=2	Y	
Q01853	Transitional endoplasmic reticulum ATPase OS=Mus musculus GN=Vcp PE=1 SV=4	Y	
Q08879	Fibulin-1 OS=Mus musculus GN=Fbln1 PE=1 SV=2	Y	
Q32P04	Keratin 5 OS=Mus musculus GN=Krt5 PE=1 SV=2	Y	
Q3TXU4	Apolipoprotein E, isoform CRA_h OS=Mus musculus GN=Apoe PE=1 SV=1	Y	
Q3UAD6	Heat shock protein 90kDa beta (Grp94), member 1 OS=Mus musculus GN=Hsp90b1 PE=1 SV=1	Y	
Q497E9	40S ribosomal protein S8 OS=Mus musculus GN=Rps8 PE=1 SV=1	Y	
Q543J5	Antithrombin OS=Mus musculus GN=Serpinc1 PE=1 SV=1	Y	
Q546G4	Albumin 1 OS=Mus musculus GN=Alb PE=1 SV=1	Y	
Q58EW0	MCG132477, isoform CRA_a OS=Mus musculus GN=Rpl18 PE=1 SV=1	Y	
Q5FW97	Enolase 1, alpha non-neuron OS=Mus musculus GN=EG433182 PE=1 SV=1	Y	
Q5SQB7	MCG68069 OS=Mus musculus GN=Npm1 PE=1 SV=1	Y	
Q61704	Inter-alpha-trypsin inhibitor heavy chain H3 OS=Mus musculus GN=Itih3 PE=1 SV=3	Y	
Q61781	Keratin, type I cytoskeletal 14 OS=Mus musculus GN=Krt14 PE=1 SV=2	Y	
Q642L7	MCG13441 OS=Mus musculus GN=Rps27a PE=2 SV=1	Y	
Q6IFZ6	Keratin, type II cytoskeletal 1b OS=Mus musculus GN=Krt77 PE=1 SV=1	Y	
Q80YQ1	Thrombospondin 1 OS=Mus musculus GN=Thbs1 PE=1 SV=1	Y	
Q8VDD5	Myosin-9 OS=Mus musculus GN=Myh9 PE=1 SV=4	Y	

Q9QWL7	Keratin, type I cytoskeletal 17 OS=Mus musculus GN=Krt17 PE=1 SV=3	Y	
Q9QZF2	Glycan-1 OS=Mus musculus GN=Gpc1 PE=1 SV=1	Y	
Q9R118	Serine protease HTRA1 OS=Mus musculus GN=Htra1 PE=1 SV=2	Y	
A1L317	Keratin, type I cytoskeletal 24 OS=Mus musculus GN=Krt24 PE=2 SV=2	N	
A2AQ07	Tubulin beta-1 chain OS=Mus musculus GN=Tubb1 PE=1 SV=1	N	
B1AQ75	Keratin, type I cuticular Ha6 OS=Mus musculus GN=Krt36 PE=1 SV=1	N	
B2RTL6	Thrombospondin 4 OS=Mus musculus GN=Thbs4 PE=1 SV=1	N	
B2RTN5	Glucocorticoid receptor DNA binding factor 1 OS=Mus musculus GN=Arhgap35 PE=1 SV=1	N	
D3YXF5	Complement component 7 OS=Mus musculus GN=C7 PE=1 SV=2	N	
E9Q0F0	Keratin 78 OS=Mus musculus GN=Krt78 PE=1 SV=1	N	
P00687	Alpha-amylase 1 OS=Mus musculus GN=Amy1 PE=1 SV=2	N	
P00688	Pancreatic alpha-amylase OS=Mus musculus GN=Amy2 PE=1 SV=2	N	
P06684	Complement C5 OS=Mus musculus GN=C5 PE=1 SV=2	N	
P14069	Protein S100-A6 OS=Mus musculus GN=S100a6 PE=1 SV=3	N	
P19246	Neurofilament heavy polypeptide OS=Mus musculus GN=Nefh PE=1 SV=3	N	
P51885	Lumican OS=Mus musculus GN=Lum PE=1 SV=2	N	
Q02105	Complement C1q subcomponent subunit C OS=Mus musculus GN=C1qc PE=1 SV=2	N	
Q0VBA8	Plasminogen activator, urokinase OS=Mus musculus GN=Plau PE=1 SV=1	N	
Q3TGR2	Fibrinogen, B beta polypeptide, isoform CRA_a OS=Mus musculus GN=Fgb PE=1 SV=1	N	
Q3U3V1	Coagulation factor X OS=Mus musculus GN=F10 PE=1 SV=1	N	
Q3UBS3	Haptoglobin OS=Mus musculus GN=Hp PE=1 SV=1	N	
Q3UEL9	Putative uncharacterized protein OS=Mus musculus GN=Serpina7 PE=1 SV=1	N	
Q3UER8	Fibrinogen gamma chain OS=Mus musculus GN=Fgg PE=1 SV=1	N	
Q3UV17	Keratin, type II cytoskeletal 2 oral OS=Mus musculus GN=Krt76 PE=1	N	

	SV=1		
Q3V3W7	Putative uncharacterized protein OS=Mus musculus GN=F13a1 PE=2 SV=1	N	
Q5DU14	Unconventional myosin-XVI OS=Mus musculus GN=Myo16 PE=1 SV=2	N	
Q6IFX2	Keratin, type I cytoskeletal 42 OS=Mus musculus GN=Krt42 PE=1 SV=1	N	
Q6IME9	Keratin, type II cytoskeletal 72 OS=Mus musculus GN=Krt72 PE=3 SV=1	N	
Q6NXH9	Keratin, type II cytoskeletal 73 OS=Mus musculus GN=Krt73 PE=1 SV=1	N	
Q8BGZ7	Keratin, type II cytoskeletal 75 OS=Mus musculus GN=Krt75 PE=1 SV=1	N	
Q8C3P7	N6-adenosine-methyltransferase subunit METTL3 OS=Mus musculus GN=Mettl3 PE=1 SV=2	N	
Q9DCV7	Keratin, type II cytoskeletal 7 OS=Mus musculus GN=Krt7 PE=1 SV=1	N	
Q9DD20	Methyltransferase-like protein 7B OS=Mus musculus GN=Mettl7b PE=1 SV=2	N	
Q9JJN5	Carboxypeptidase N catalytic chain OS=Mus musculus GN=Cpn1 PE=1 SV=1	N	
V9GX81	Maestro heat-like repeat family member 6 OS=Mus musculus GN=Mroh6 PE=4 SV=1	N	