

A Novel Method of High-Purity Extracellular Vesicle Enrichment from Microliter-scale

Human Serum for Proteomic Analysis

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Supporting Information

Table S1. EVs marker list retrieved from Minimal information for studies of extracellular vesicles 2018 (MISEV2018)

Category	Human Gene Name
Transmembrane or GPI-anchored proteins	1a) Non-tissue specific CD63, CD81, CD82, CD47, GNA*, HLA-A/B/C, H2-K/D/Q, ITGA*/ITGB*, TFR2, LAMP1/2, SDC*, BSG, ADAM10, NT5E, CD55, CD59, SHH.
	1b) Cell/tissue specific TSPAN8, CD37, CD53, CD9, PECAM1, ERBB2, EPCAM, THY1, PTPRC, ITGA2B, GP9, GYPA, CD14, HLA-DR/DP/DQ, H2-A*, CD3*, AChE, APP, ABCC1
Cytosolic proteins recovered in EVs	2a) With lipid or membrane protein-binding ability TSG101, CHMP*, PDCD6IP(ALIX), VPS4A/B, ARRDC1, FLOT1/2, CAV*, EHD*, RHOA, ANXA*, HSPA8, HSP90AB1, ARF6, SDCBP, MAPT
	2b) Promiscuous incorporation in EVs (and possibly exomeres) HSPA1A, ACT*, TUB*, GAPDH
Others	HIST1H**, LMNA, IMMT, CYC1, TOMM20, CANX, HSP90B1, HSPA5, GOLGA2, ATG9A, ACTN1/4, KRT18, TGFB1/2, IFNG, VEGFA, FGF1/2, PDGF*, EGF, IL*, FN1, COL**, MFGE8, LGALS3BP, CD5L, AHSG

* or ** used for families of multiple proteins

Table S2. List of top 10 most abundant serum proteins and apolipoproteins commonly present in lipoprotein particles

	Protein name	Gene symbols
Top 10 blood proteins	Albumin	ALB
	IgGs	IGHG1; IGHG2; IGHG3; IGHG4
	Transferrin	TF
	Fibrinogen	FGG; FGA; FGB
	IgAs	IGHA1; IGHA2
	α -2-Macroglobulin	A2M
	IgMs	IGHM
	α -1-Antitrypsin	SERPINA1
	Complement C3	C3
	Haptoglobin	HP
Apolipoproteins	Apolipoprotein A	APOA1; APOA2; APOA4; APOA5
	Apolipoprotein B	APOB
	Apolipoprotein C	APOC1; APOC2; APOC3; APOC4
	Apolipoprotein E	APOE
	Apolipoprotein (a)	LPA