

Enrichment of Astrocyte-Derived Extracellular Vesicles from Human Plasma

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Citation

Valle-Tamayo, N., Pérez-González, R., Chiva-Blanch, G., Belbin, O., Serrano-Requena, S., Sirisi, S., Cervantes González, A., Giró, O., Sánchez-Aced, É., Dols-Icardo, O., Alcolea, D., Carmona-Iragui, M., Jimenez, A., Lleó, A., Fortea, J., Iulita, M.F. Enrichment of Astrocyte-Derived Extracellular Vesicles from Human Plasma. *J. Vis. Exp.* (186), e64107, doi:10.3791/64107 (2022).

Date Published

August 3, 2022

DOI

10.3791/64107

URL

jove.com/video/64107

Materials

Name	Company	Catalog Number	Comments
Anti-Alix primary antibody for Western blotting	EMD Millipore	ABC40	
µMACS Separator	Miltenyi Biotec	130-042-602	The µMACS Separator is used in combination with µ Columns and MACS MicroBeads.
Anti-calnexin primary antibody for Western blotting	Genetex	GTX109669	
Anti-CD9 primary antibody for Western blotting	Cell Signaling	13174	
Blocker BSA (10%) 200 mL	Thermo Fisher	37525	
Branson 1510E-MT Ultrasonic bath	Branson		
COBAS 6000 autoanalyzer	Roche Diagnostics		Analyzer for immunoturbidimetric determination of ApoB; commercial autoanalyzer
cOmplete Protease Inhibitor Cocktail (EDTA-free)	Roche	11873580001	
Digital Micrograph 1.8			micrograph software
Dulbecco's PBS Mg++, Ca++ free 500 mL	Thermo Fisher	14190144	
EveryBlot Blocking Buffer	BioRad	12010020	
Exoquick (exosome precipitation solution 5 mL) + Thrombin	System Bioscience	EXOQ5TM-1	ExoQuick 20 mL can also be purchased (EXOQ20A-1)
Gatan 895 USC 4000			camera
GeneGnome XRQ chemiluminescence imaging system	Syngene		

Human CD81 antigen (CD81) ELISA kit	Cusabio	CSB-EL004960HU	
Human Programmed cell death 6-interacting protein (PDCD6IP) ELISA kit	Cusabio	CSB-EL017673HU	
Immun-Blot PVDF Membrane	BioRad	1620177	
JEOL 2011 transmission electron microscope	JEOL LTD		Equipped with a CCD Gatan 895 USC 4000 camera (Gatan 626, Gatan, Pleasanton, USA)
Lavender EDTA BD Vacutainer K2E tubes	Becton dickinson	367525	
Leica EM GP	Leica Microsystem		commercial plunge freezer
Low binding microtubes 1,5 mL	Deltalab	4092.3NS	
MACS μ Columns with plungers	Miltenyi Biotec	130-110-905	μ Columns with plungers are especially designed for isolation of exosomes from body fluids
MACS Multistand	Miltenyi Biotec	130-042-303	
MAGPIX plate reader	Luminex Corporation	80-073	Luminex's xMAP multiplexing unit (Luminex xPonent v 4.3 software)
MicroBead Kit100 μ L Anti-GLAST (ACSA-1)-Biotin, human, mouse, rat – small size; 100 μ L Anti-Biotin MicroBeads	Miltenyi Biotec	130-095- 825	
MILLIPLEX MAP Kit Human cytokine/Chemokine/Growth Factor Panel A magnetic bead panel	EMD Millipore	HCYTA-60K-25	
M-PER Mammalian Protein Extraction Reagent 25 mL	Thermo Fisher	78503	For certain applications like Western blot, more aggressive lysis buffers can be used (e.g. RIPA)
MultiSkan SkyHigh Microplate Spectrophotometer	ThermoFisher	A51119500C	
NanoSight NS300	Malvern Panalytical		NTA; 3.4 version
Pierce Halt Protease and Phosphatase Inhibitor Cocktail	Thermo Fisher	78441	
Polypropylene syringe (G29)	PeroxFarma		1mL syringe; 0.33x12mm-G29x1/2"
Secondary anti-rabbit antibody	Thermo Fisher	10794347	
Simoa GFAP Discovery Kit	Quanterix	102336	
Simoa, SR-X instrument	Quanterix		SR-X Ultra-Sensitive Biomarker Detection System; commercial biomarker detection technology
Specific Protein Test Apolipoprotein B - APOB (100 det) COBAS C/CI	Roche Diagnostics	3032574122	
SuperSignal West Femto	Thermo Fisher	34095	Ultra-sensitive enhanced chemiluminescent (ECL) HRP substrate
Trans-Blot Turbo Transfer System	BioRad	1704150	