

Purified and lyophilized Exosomes and Microvesicles

Save time and get pure EVs

HBM-LS lyophilized Extracellualr Vesicles are isolated through a combination of Tangential Flow Filtration (TFF) and size exclusion chromatography (SEC). Vesilces are subsequently quantified and validated for overall protein content and particle number by Nanoparticles Tracking Analysis (NTA, Zetaview).

Lyophilized Extracellular Vesicles available in stock				
Purified from human biofluids (healthy donors pool)				
Plasma	Serum	Urine		
Purified from cell conditioned media				
Colorectal carcinoma	HCT116, HT29, COLO1			
Prostate carcinoma	PC3, LnCAP			
Lung carcinoma	A549, NCI-H1975			
Chronic leukemia	K562			
Glioblastoma	U87			
Neuroblastoma	SK-N-SK			
Melanoma	MM1, B16F10 (mouse melanoma)			
Hum. embryonic kidney	HEK293			
Mesenchymal stem cells	Primary cells from human adipose tissue (pool)			
Upon request, EV purification can be performed from 200 different tumor cell lines. Contact: info@hansabiomed.eu				

Lyophilization preserves EV stability for long term storage



WB of Freash (F), Frozen (-20) and Lyophilized exosomes (L). Particle size distribution chart of Exosomes stored lyophilized or frozen.

Characteristics

- Highly pure
- Size distribution of smallEVs/ Exosomes: 50-120 nm
- Size distribution of large EVs/ Microvesicles: 150-500 nm

Applications

- Positive control for multiple tecniques
- Phenotyping assays
- Nucleic acid profiling

Advantages

- Long term storage stability
- Easy to reconstitue
- Available from a large biobank of cell lines



The best standard for your EV research

Lyophilized Exosome and Microvesicle applications in EV research

Electron Microscopy (EM) and Immuno Electron Microscopy (IEM)



EM of lyophilized Exosomes from HCT116 cell line (HBM-HCT116-100)



C81 detection by IME in HCT116 lyophilized exosomes. Anti-CD81(HBM-LS)



CD9 detection by IME in HCT116 lyophilized Exosomes. Anti-CD9(HBM-LS)

Nanoparticle tracking analysis in scattered and fluorescence mode

Lyophilized Exosomes and Microvesicles can be used as positive control for NTA in scattered and fluorescence mode. HCT116 exosomes were labeled respectively with CMDR (Thermofisher) and a mixture of Anti-CD9, Anti-CD63, Anti-CD81 Alexa-Flour-488 conjugated (Thermofisher). The dye excess has been removed by SEC using mini-PURE-EVs columns.



Phenotyping assays and marker analysis by different techniques



ELISA phenotyping of lyophilized Exosomes from human serum (HBM-PES-##)

	HBM-PEP (20 µg)	HBM-PEU (20 µg)	
40,00			
38,00 -			
36,00 -		ж	miR45
34,00 -	×	×	miR37!
t 32,00 -	-		* miR22
ng 30,00 -		*	× miR21
_{හි} 28,00 -	-	•	▲ miR14
26,00 -		-	miR21
24,00 -	•		 miR16
22,00 -			
20,00			

miRNAs in lyophilized Exosomes from human plasma (HBM-PEP) and urine (HBM-PEU)



Detection by WB of CD81 and Alix (HBM-LS antobodies) in different lyophilized Exosomes



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