Extracellular Vesicle Products

Catalogue (Status 12/2025)

Contact:

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Quality Promise and Product Description

Phoenestra stands for outstanding product quality.

Extracellular Vesicle (EV) Preparations are produced from stable cell lines using an agitated packed bed bioreactor (proprietary IP), followed by depth filtration, TFF purification and sterile filtration.

MSC-EV are available from the following telomerized cell lines:

Cell Line*	Source
ASC/TERT300	Adipose tissue
BM-MSC/TERT292	Bone marrow
WJ-MSC/TERT273	Wharton´s Jelly
P-MSC/TERT308	Amniotic Membrane
CP-MSC/TERT308	Chorionic Plate

**Immortalized cell lines generated by Evercyte*

Product Grades

Quality	Manufacturing	Quality Control	Status
R&D	Controlled and standardized processing including final sterile filtration	Protein concentration Particle concentration Particle size Particle Marker Phenotyping (mi)RNA sequencing Biological Activity Sterility* Endotoxins*	In stock
GMP	Clean Room, GMP-compliant	In preparation	In preparation

** upon request (data from representative batches available)*

Supply Quantities

Scale	Vial Volume & EV Concentration	Lot Size
R&D **250 mL bioreactor**	Customizable volume (standard 150 µL) 10^{10}-10^{11} EV/mL	10^{12}-10^{13} total EV
GMP **> 2L bioreactor**	Customizable 10^{10}-10^{11} EV/mL	10^{13}-10^{14} total EV

EV counts: TFF-purified and sterile filtered product

Activity and Stability

Overview of biological activities of MSC-EV

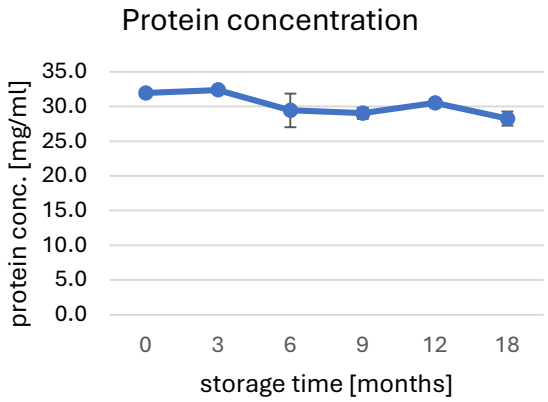
Extracellular Vesicles from Mesenchymal Stromal Cells (**MSC-EV**) from different tissues display biological functionalities as tested in developed cell-based bioassays. We ensure and consistently receive validation for the **superior quality and efficacy** of our products.

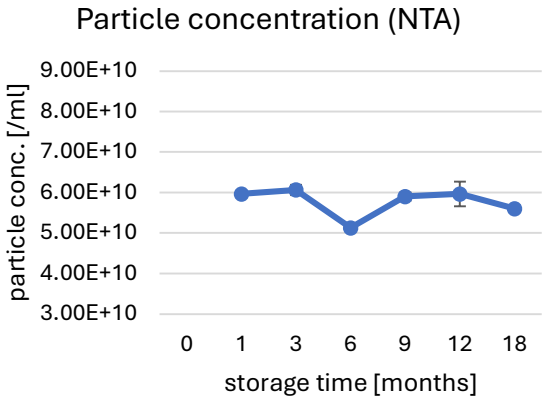
Assay	EV1	EV2	EV3	EV4	EV5	Comment
Anti-Fibrosis 2D	+++	++	++	++	-	human skin fibroblasts
Anti-Fibrosis 3D	++	+++	+*	+*	+++	human liver organoids
Anti-Inflammation	+/++	++	++	++	+++	mouse macrophage/microglia
CD73 Activity	++	++	+++	++	++	enzyme activity assay
Proliferation - Kidney	++	+++	+++	++	+++	human tubular cells
Proliferation - Nerve	++	+	n.a.	+++	n.a.	human Schwann cells
Wound Healing	+++	n.a.	n.a.	n.a.	n.a.	HaCaT cell scratch assay
Vasculogenesis 2D	+++	+++	++	+++	+++	HUVEC Matrigel assay
Vaculogenesis 3D	+++	+++	+++	++	+*	HUVEC 3D Fibrin clot assay
Cardioprotection	+++	n.a.	n.a.	+++	n.a.	rat cardiac myoblast assay
*not significant		n.a. ... not analyzed				

+++ = 80-100% activity of positive control in assay, ++ = 40-80%, + = 10-40%
EV1-5: different MSC-EV preparations. If you are interested in a specific EV preparation with a certain combination of biological activities, please contact us and we will provide you with the corresponding product.

MSC-EV Stability Study

Product stability was proven for storage at -80°C up to 18 months on the particle level (protein concentration and particle count).





Contact Information

For further information and quote requests, please contact us under:
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