

MSCPure™ Information Card

Doc Num: IC-MP Rev A



1 Product Description

Name:	MSCPure™
Part Number:	MP10 - 10ml MP50 - 50ml
Function:	Prevent aggregation of protein complexes during the filtration process using VanoFlow® EV Isolation Cassettes to improve EV purity from complex samples, such as mesenchymal stem cell (MSC) conditioned culture medium (CCM) or plant extracts
Shelf Life:	One (1) year from the date of manufacturing
Storage:	Store at 2-8 °C
Sterility:	0.2µm filtered and sterile packaged

2 Background

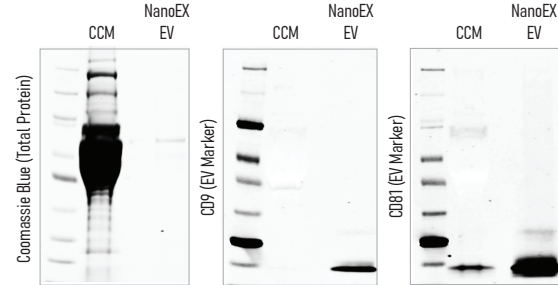
MSC CCM often contains large protein complexes, such as extracellular matrix (ECM) proteins, either from added supplements or secreted by MSC during culture. These protein complexes are prone to aggregation during filtration process, leading to increased membrane fouling and lower EV purity. MSCPure™ is a mixture of therapeutic-grade, non-detergent additives that effectively reduce protein aggregation even at low concentrations, thereby significantly improve the EV purity from MSC CCM, as well as other complex samples, such as plant extracts.

3 Instruction for Use

Recommended Conc.:	1:200 dilution
Working Range:	1:100 - 1:400 dilution
Instruction:	Dilute MSCPure directly into the sample and mix well immediately. For example, add 1.5mL of MSCPure into 300mL of MSC CCM. Although 1:200 dilution works well for majority of samples, the working concentration of MSCPure may be optimized for specific samples. For example, a higher concentration (1:100) may benefit CCM with high viscosity.

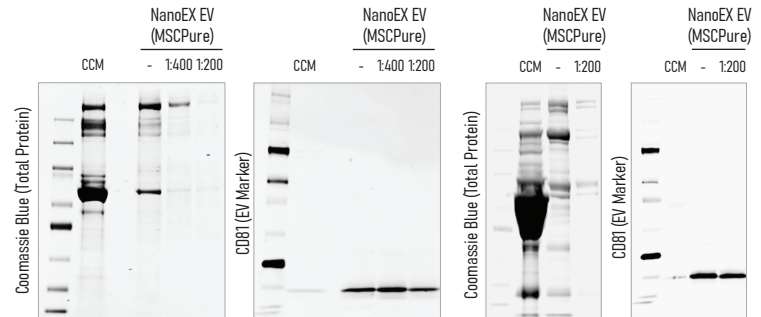
4 Supporting Data

MSCPure is not required for most cell line CCM - NanoEX can remove >99% free protein from most cell line CCM containing regular exosome-depleted FBS without using MSCPure



HEK293 CCM (10% Exosome-depleted FBS)

MSCPure is highly recommended for MSC CCM - MSCPure prevents aggregation of large protein complexes in MSC CCM and membrane fouling, hence improves the purity of isolated EV



MSC CCM
Commercial medium

MSC CCM with
5% human platelet lysate (HPL)