

EX304 Instant Exosomes™ from Mesenchymal Stem Cells

Description

Instant Exosomes™ isolated from mesenchymal stem cells (MSCs). Exosomes are isolated following a combination of precipitation and size exclusion chromatography (SEC). The exosome samples are characterized for overall protein content, using a BCA assay, expression of commonly expressed exosomal markers (CD9, CD63 and CD81) using the ExoLISA™ exosome detection assay and, particle concentration and size distribution by nanoparticle tracking analysis (NTA).

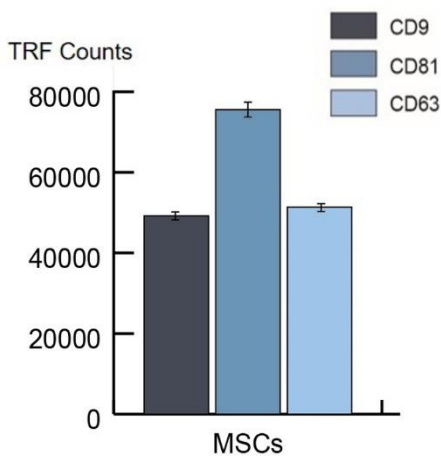
Properties

Protein content per vial	25 µg
Method of isolation	Precipitation and size exclusion chromatography (SEC)
Characterized by	ExoLISA™ exosome detection assay, nanoparticle tracking analysis (NTA) and BCA assay
Removal of bovine Evs	Serum-free media replaces FBS-supplemented media for the final 72 hours of the cell culture process, significantly depleting the number of residual bovine EVs present in Instant Exosomes™
Nanoparticles/ml (average)	1 x 10 ⁹
State	Freeze-dried
Stability and Storage	12 months from the date of receipt when stored at -20°C as supplied. Up to 1 month when stored at -20°C, or 6 months when stored at -80°C, after reconstituting as directed. Avoid repeated freeze-thaw cycles.

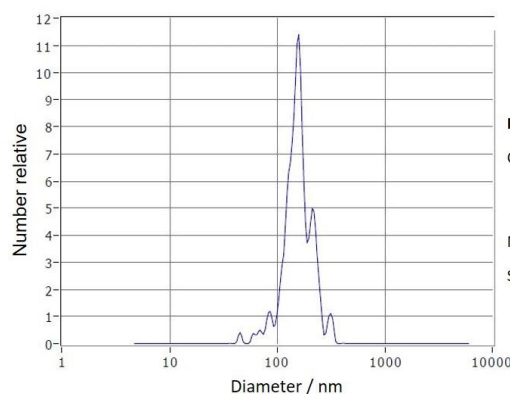
Reconstitution Procedure

Reconstitute each vial with 250 µL of deionised or other ultrapure water for a final concentration of 100 µg/mL. Any further dilution once reconstituted may be done in 1X PBS or cell media to maintain osmolality. Resuspend the exosomes by pipetting the solution up and down, whilst avoiding bubbles. Vortex the reconstituted sample for 60 seconds. Briefly centrifuge the sample to ensure that the solution is collected at the bottom of the tube.

Data



Commonly expressed exosomal markers assessed using the ExoLISA™ exosome detection assay are shown to be differentially expressed from Instant Exosomes™ isolated from MSCs.



Particle size distribution of Instant Exosomes™.

Results:

Concentration: 9.3E+9 Particles / mL

	Number	Concentration	Volume
Median (X50)	153.7	153.7	200.1
Span	48.9	48.7	59.2