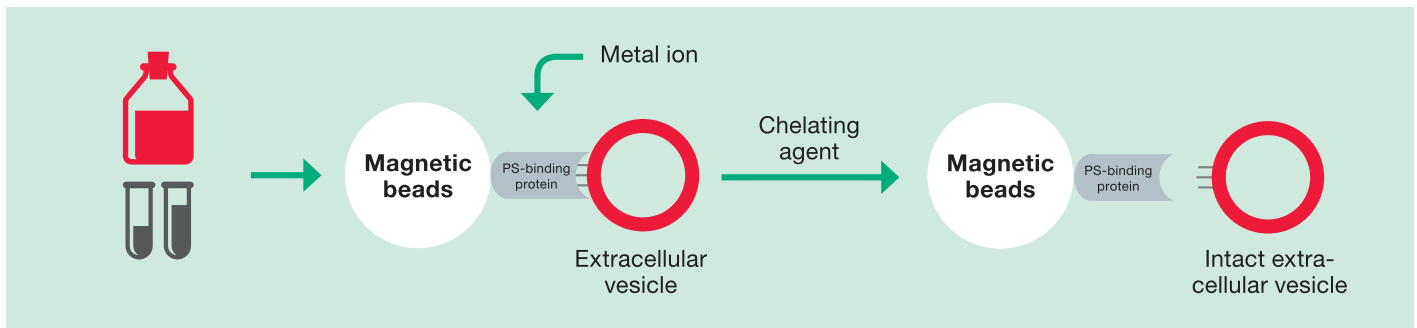


MagCapture™ EXOSOME ISOLATION KIT PS

EXOSOME ISOLATION BY A NOVEL AFFINITY METHOD



MagCapture™ Exosome Isolation Kit PS adopts a novel affinity purification method using magnetic beads and a phosphatidylserine (PS)-binding protein.

By using a phosphatidylserine (PS)-binding protein, extracellular vesicles are captured in a metal ion-dependent manner and are subsequently eluted from magnetic beads with a metal-chelating reagent at neutral pH.

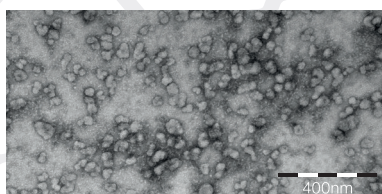
- + Isolation by PS affinity method
- + Purification from cell culture medium and body fluids
- + High purity and high yield of intact exosomes and other EVs
- + Ultracentrifugation is not required

COMPARISON WITH OTHER PURIFICATION METHODS:

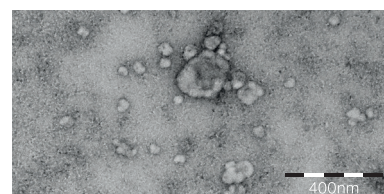
| METHOD | EXOSOME PURITY | EXOSOME RECOVERY | INTACT VESICLES RECOVERY |
|--|----------------|------------------|--------------------------|
| PS affinity method | +++++ | ++++ | Yes |
| Ultracentrifugation | ++ | ++ | Yes |
| Polymer-based precipitation | + | ++ | Yes |
| Exosome surface antigen affinity method (using antibodies) | +++++ | ++ | No |

+ Very low ++ Low +++ Medium ++++ High +++++ Very High

ELECTRON MICROSCOPIC ANALYSIS OF ISOLATED EXOSOMES:



PS affinity method
using MagCapture™
Exosome Isolation
Kit PS



Ultracentrifugation

x100,000 Bar: 400nm

The electron microscope images were provided by Dr. R. Hanayama at Graduate School of Medicine, Kanazawa University and Dr. W. Nakai at iFRc, Osaka University.