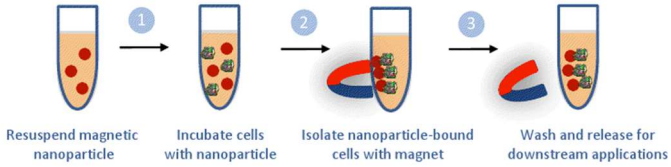
MagVigen™ - Anti-PD L1, Human Nanoparticles
Cat # K51010

Product Description

MagVigen™ - Anti-PD L1 nanoparticles are ideal for epithelial tumor cell enrichment for cellular or molecular analysis. MagVigen™ Anti-PD L1 recognizes and efficiently binds to human epithelial cells following a short incubation. The generated nanoparticle-cell complex can be separated from the rest of the sample by magnet. The cells can be detached from the beads with the Release Buffer supplied.



MagVigen™ - Anti-PD L1 enables high recovery of high-purity and viable cells for use in further downstream molecular or cellular assays. The beads bound cells can be lysed for further protein or nucleic acid purification. MagVigen™ nanoparticles are much smaller than conventional micro-beads. This feature allows for better accessibility of the nanoparticles to the antigenic epitope on cell surface. In addition, the surfaces of MagVigen™ nanoparticles are uniquely coated to reduce non-specific interactions with non-targeted cells.

Product Contents

- MagVigen™ - Anti-PD L1 nanoparticles (Cat # 51010) are provided in phosphate buffered saline (PBS), pH 7.4. Each vial contains 1 ml of solution with a particle concentration of 1 mg/ml, which is enough for approximately 50 cell capture assays.
- Washing Buffer (10X), 15 ml

All materials should be stored at 4°C.

Shelf life: up to 6 months.

Protocol

This protocol provides a general guidance for enriching 10^5 cells using MagVigen™- Anti-PD L1 Please adjust the amount of reagents for specific application.

1. Dilute 10X Washing Buffer with PBS to make 1X Washing Buffer.
2. Gently vortex or pipette the MagVigen™- Anti-PD L1 nanoparticles in the vial before use.
3. Aliquot 20 µl nanoparticle solution for enrichment experiment. **Note:** 20 µl is generally sufficient for the enrichment of 1-10x10^5 cells. Cell capture efficiency can be affected by factors such as frequency of target cells in the cell population, density of antigen/epitope expressed on the cell surface, and the antibody affinity. Adjust the amount of nanoparticles accordingly.
4. Wash nanoparticles with 500 µl 1X Washing Buffer twice. Separate the nanoparticles from the solution by placing the magnet on the side of the tube for 1-2 min and remove the supernatant carefully (with magnet still on the side).
5. Incubate the nanoparticles with the cell sample on an orbital shaker for 30 – 60 minutes at room temperature.
6. After incubation, use a magnet to separate the nanoparticles (with bound cells) from the solution, and carefully remove the supernatant.
7. Wash the nanoparticle-cell complex with 500 µl cell culture medium twice.
8. Isolated cells can be re-suspended in cell culture medium for downstream applications.