AcnoviaBeads Human CD3

Product Description

AcnoviaBeads Human CD3 (Cat. No. AC68965) is composed of 4.5 μm magnetic beads conjugated with anti-human CD3 antibodies, which can easily separate or remove human $CD3^+$ T cells from peripheral blood, bronchial lavage, cell culture, or various tissues such as lymphoid, nasal, and tumor tissue. T cells isolated by AcnoviaBeads Human CD3 have been used for various studies, such as T cell cytotoxicity, T cell activation, signal transduction and so on.

Product Information

Catalog	AC68965
Reactivity	Human
Concentration	2×10^8 beads/mL
Particle sise	4.5μm
Endotoxin	<1 EU/mg
Usage	Separate or remove human $CD3^+$ T cells from peripheral blood, bronchial lavage, cell culture, or various tissues such as lymphoid, nasal, and tumor tissue.
Formulation	phosphate buffered saline (PBS), containing Bovine Serum Albumin (BSA), pH 7.4.
Stability	24 months
Storage	2℃ to 8℃,Do not freeze

Protocol

Wash AcnoviaBeads Human CD3

1. Resuspend the AcnoviaBeads Human CD3 (beads) in the tube (vortex for >30 sec, or tilt and rotate for 5min).

2. Transfer the beads with a desired volume into a tube**.**

3. Add equal volume of PBS (0.1%BSA), if the beads volume is less than 1m L, add 1mL PBS (0.1%BSA) for resuspension.

4. Place the tube in a magnet for 1 min, and then discard the supernatant.

5. Remove the tube from the magnet, then use the same volume of PBS (0.1%BSA) to resuspend the beads.

Separate $CD3^+$ T cells

This protocol is based on 1 mL (1×10^7) PBMCs. If the volume is less than 1m L, add PBS (0.1%BSA) for resuspension. If the volume is larger than 1mL, scale up all volumes in corresponding proportions.

1. Transfer 1mL (1×10^7) PBMCs and add 50uL washed beads.

2. Rotate the samples with a speed of 50~120 rpm/min, and incubate them at room temperature for 30 min.

3. Dilute the mixture of beads and cells with cell culture media or PBS (0.1%BSA) to ensure the separation volume for magnetic selection. Following this, place the tube on the magnet for 1~2min.

4. Remove the supernatant, then resuspend the mixture of beads and cells with PBS (0.1%BSA), and place the tube on the magnet for 1~2min, While the tube is still in the magnet, carefully remove and discard the supernatant.

5. Wash the bead-bound $CD3^+$ T cells for 2-3 times, and then resuspend the mixture of beads and cells with preferred cell culture media. Keep the cells on 2°C to 8°C until further use in downstream applications.

Materials Required

1. Magnet
2. Mixer allowing tilting and rotation of tubes

Notices and Tips

1. It is forbidden to place the product in a magnetic field for a long time to avoid magnetic bead agglomeration, resulting in reduced binding activity.
2. When this product is stored unopened at 2-8 ℃, it is stable until the expiration date indicated on the label. Store the opened vials at 2-8 ℃ to avoid bacterial contamination.
3. Keep the product in liquid suspension during storage and all handling steps, as drying can cause performance degradation, resuspend before use.
4. This product is for research purposes only.