AcnoviaBeads Human CD45

Product Description

AcnoviaBeads Human CD45 (Cat. No. AC68966) is composed of 4.5 μm magnetic beads conjugated with anti-human CD45 antibodies, which are for the separate or remove of $CD45^+$ leukocytes from peripheral blood, erythrocyte and thrombocyte preparations, lymphoid tissues, as well as nonhematopoietic tissues. It also can enrichment of epithelial tumor cells from peripheral blood, bone marrow, or lymphoid tissue by remove of $CD45^+$ leukocytes.

Product Information

Catalog	AC68966
Reactivity	Human
Concentration	2×10^8 beads/mL
Particle size	4.5 μm
Endotoxin	<1 EU/mg
Usage	Separate or remove of leukocytes from peripheral blood, red blood cell or platelet preparations, lymphoid tissue, tumor tissue, or non-hematopoietic 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 CD45

1. Resuspend the AcnoviaBeads Human CD45 (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 $CD45^+$ 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 $CD45^+$ 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.