Human Claudin-18.2 coupled magnetic beads (2 μm)

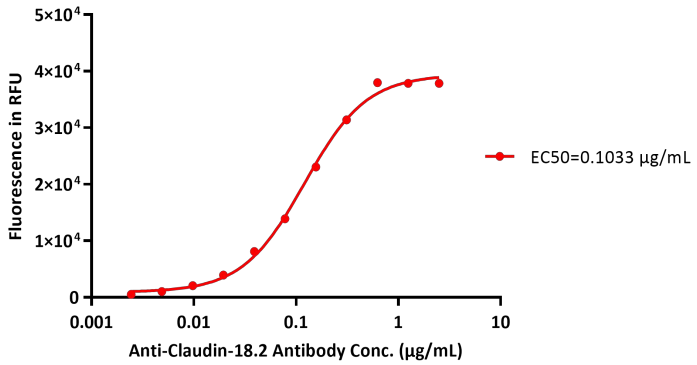
Cat.No. MBC-K204

Product Description

The Human Claudin-18.2-coupled Magnetic Beads is produced by coupling biotinylated human Claudin-18.2 protein to streptavidin-conjugated magnetic beads. The pre-coupled beads are ready to use for capturing proteins from your sample with high specificity. The uniform size and large surface-to-volume ratio of the beads ensure highly efficient immunocapture in a simple, fast and convenient workflow with high reproducibility of data.

Sample Data

Binding of Anti-Claudin-18.2 Antibody to Human Claudin-18.2 Pre-Coupled Beads



Immobilized Human Claudin-18.2 to 1mg Beads can bind the Anti-Claudin-18.2 with an EC50 of 0.1033μg/mL.

Protein Information

Protein Description: Biotinylated Human Claudin-18.2 His, Avitag
Expression platform: InsectCells-HI5
AA range: Met 1 - Ala 200
Calculated MW: 51.5 kDa

Beads Information

Bead size: 2 mg/10mg （5mg×2）
Particle size: 2 μm
Magnetism: Superparamagnetic

Applications

This product is intended for immunocapture, biopanning and flow cytometry. This is a non-sterile product.

Storage

The shelf life is 2 year at -20℃ in lyophilized form.

Immediate use after reconstitution is highly recommended.

General guidelines

Use a magnetic separator that is suitable for your equipment and application. Allow the beads to separate for at least 1 minute before removing supernatant. The beads are dense and will tend to settle very quickly. Be sure that any bead mixture is homogenous before aliquoting.

Before any experiment, it is necessary to wash the magnetic beads and remove the trehalose from the formulation buffer and change the buffer to your Assay/Washing Buffer.

1. Place the tube with reconstituted beads on a magnetic separator for 2 min. Remove the supernatant.

2. Remove the tube from the magnetic separator and resuspend the pelleted beads in equal volume (or at least 1000μL) of Assay/Washing Buffer. Mix by vortex for approximately 10 sec.

3. Place the tube on the magnetic separator for 2 min. Remove the supernatant.

4. Wash the beads for three times in total by repeating steps 2 and 3.

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Binding assay

Below is a suggested **protein or Antibody** binding protocol for your reference.

1. Reconstitute and wash the magnetic bead s according to the Certificate of Analysis. Immediate use is strongly recommended.

2. Add 1mL Assay/Washing Buffer per mg Beads to resuspend the beads. The most common Assay/Washing Buffer is PBS, pH 7.3, with 0.05% Tween-20. Optionally. When assaying a serum sample, please choose a Special Assay/Blocking Buffer to minimize the background signal, you may add 0.05% BSA.

3. Sample Dilution: Dilute your protein or Antibody of interest from in Assay buffer 5 - 0.00244 μg/mL.

4.Add 100μL Beads to tube Place the beads on the magnetic separator for 1-2 min. Remove the supernatant.

5. Add 100 μL diluted samples to the pelleted beads, and mix the beads with samples by mixer. Add 100 μL of assay buffer as a blank control into wells containing the beads.

6. Cover the tubes on a rotator or place the plate on a plate mixer and incubate for 60 minutes at room temperature. Alternatively, rotate overnight at 4°C.

7. Place the tube on the magnetic separator for 2 min. Remove the supernatant.

8. Remove the tube/plate from the magnetic separator and resuspend the pelleted beads in 200 μL of Assay/Washing Buffer by a vortex.

9. Wash the beads for a total of 4 times by repeating steps 7–8. After the last wash, remove the supernatant.

10. Dilute your Secondary Antibody in Assay buffer. Add 100μL secondary antibody (at an appropriate dilution ratio) to the beads. We recommend PE anti-Human IgG Fc (Thermo, 12-4998-82), 1:600to detect your antibody samples. Any other fluorescent-labeled secondary antibody is appropriate.

11.Place the tubes on a rotator or place the plate on a plate mixer, and incubate for 60 minutes at room temperature. Cover with foil to avoid photobleaching.

12. Repeat steps 7-8 for a total of four wash with Assay/Washing buffer. After the last wash remove the supernatant.

13. Add 100 μL of Assay/Washing Buffer to the beads, and resuspend the Beads.

14 Transfer the 100μL beads into a 96-well black plate that is compatible with your plate reader. Keep the beads well suspended.

15. Read the plate at excitation 488 nm/emission 575 nm on a plate reader within 10 min (Avoid the precipitation of the beads).

Important Note

This product is for research use only and not intended for therapeutic or *in vivo* diagnostic use.

Contact Information

If you have any questions, please contact our technical support team at: TechSupport@acrobiosystems.com

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