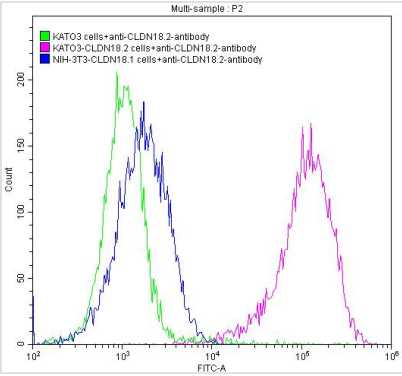
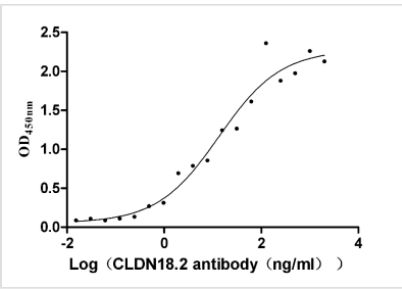
Claudin-18.2 Recombinant Monoclonal Antibody

Product Code	CSB-RA005498A1HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P56856-2
Immunogen	Recombinant Human Claudin-18.2 protein
Species Reactivity	Human
Tested Applications	ELISA, FC; Recommended dilution: FC:1:50-1:200
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Preservative: 0.03% Proclin 300 Constituents: 50% Glycerol, 0.01M PBS, PH 7.4
Purification Method	Affinity-chromatography
Isotype	hIgG1
Clonality	Monoclonal
Product Type	Recombinant Antibody
Immunogen Species	Homo sapiens (Human)
Research Area	Signal transduction
Gene Names	CLDN18
Clone No.	9C2

Image



Untransfected KATO3 cells surface (green line), transfected Human CLDN18.2 KATO3 stable cells surface (red line) and transfected Human CLDN18.1 NIH-3T3 stable cells surface (blue line) were stained with anti-CLDN18.2 antibody (2µg/1*10^6 cells), washed and then followed by FITC-conjugated anti-Human IgG Fc antibody and analyzed with flow cytometry.



The Binding Activity of Human CLDN18.2 with Anti-CLDN18.2 recombinant antibody.
Activity: Measured by its binding ability in a functional ELISA. Immobilized Human CLDN18.2 (CSB-MP005498HU(A5)) at 5 µg/mL can bind Anti-CLDN18.2 recombinant antibody, the EC_{50} is 6.554-27.87 ng/mL.

Description

The creation of the Claudin-18.2 recombinant monoclonal antibody involves a meticulous process to ensure its high quality and specificity. Initially, B cells are isolated from the spleen of an immunized animal, with the recombinant human Claudin-18.2 protein serving as the immunogen. The RNA extracted from the B cells is converted into cDNA through reverse transcription. The Claudin-18.2 antibody genes are then amplified using specific primers targeting the antibody constant regions and inserted into an expression vector. This vector is subsequently transfected into host cells, facilitating the production of the Claudin-18.2 recombinant monoclonal antibody. After a period of cell culture, the antibody is collected from the cell culture supernatant and purified using affinity chromatography, yielding a highly purified form suitable for diverse applications. Stringent characterization assays, including ELISA and FC analysis, are performed to validate the antibody's specificity and functionality in detecting human Claudin-18.2 protein. The meticulous production process guarantees the development of a reliable and effective Claudin-18.2 recombinant monoclonal antibody, which plays a vital role in various Claudin-18.2-related research.