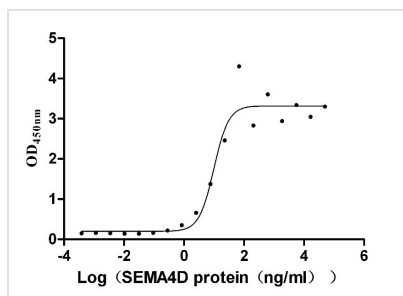




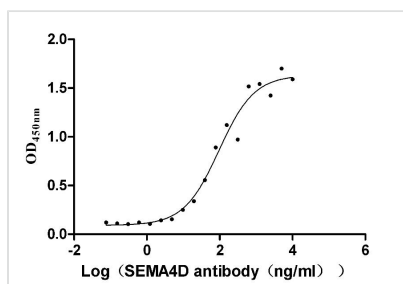
SEMA4D Recombinant Monoclonal Antibody

Product Code	CSB-RA835707A2HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	Q92854
Immunogen	Recombinant Human SEMA4D protein
Species Reactivity	Human, Mouse
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	hIgG4(S228P)
Clonality	Monoclonal
Product Type	Recombinant Antibody
Immunogen Species	Homo sapiens (Human)
Research Area	Immunology
Gene Names	SEMA4D
Clone No.	5D12

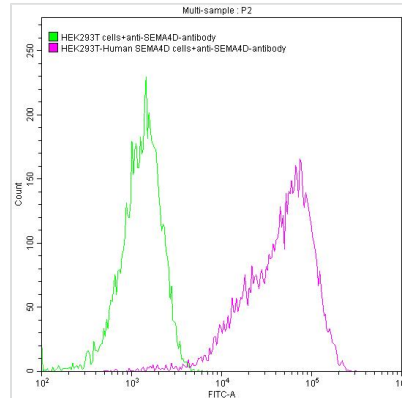
Image



The Binding Activity of Mouse Sema4d with Anti-SEMA4D recombinant antibody
Activity: Measured by its binding ability in a functional ELISA. Immobilized Anti-SEMA4D recombinant antibody at 2 µg/mL can bind Mouse Sema4d (CSB-MP020990MO), the EC₅₀ is 5.829-16.86 ng/mL.



The Binding Activity of Human SEMA4D with Anti-SEMA4D recombinant antibody
Activity: Measured by its binding ability in a functional ELISA. Immobilized Human SEMA4D (CSB-MP835707HU) at 2 µg/mL can bind Anti-SEMA4D recombinant antibody, the EC₅₀ is 60.38-152.6 ng/mL.



Untransfected HEK293T cells surface (green line) and transfected Human SEMA4D HEK293T stable cells surface (red line) were stained with anti-SEMA4D antibody ($2\mu\text{g}/1 \times 10^6$ cells), washed and then followed by FITC-conjugated anti-Human IgG Fc antibody and analyzed with flow cytometry.

Description

The SEMA4D recombinant monoclonal antibody is generated using a multi-step process. Firstly, the SEMA4D monoclonal antibody is collected, and its gene sequence is determined. Next, a vector containing the SEMA4D monoclonal antibody gene is created and transfected into a host cell line for culture. During the SEMA4D monoclonal antibody synthesis, a recombinant human SEMA4D protein is used as an immunogen. The SEMA4D recombinant monoclonal antibody is then purified through affinity chromatography and assessed for specificity using ELISA and FC applications. It can react with human and mouse SEMA4D proteins.

The SEMA4D protein plays a role in cell-cell communication and is involved in various cellular processes such as axon guidance, angiogenesis, and immune response. It acts as a ligand for the receptor plexin-B1 and also binds to the integrin receptor alpha-v beta-1. SEMA4D regulates cell migration, proliferation, and survival by modulating intracellular signaling pathways, including the Rho GTPase pathway and the Akt/mTOR pathway. It is also involved in cancer progression and metastasis by promoting tumor cell invasion and angiogenesis.