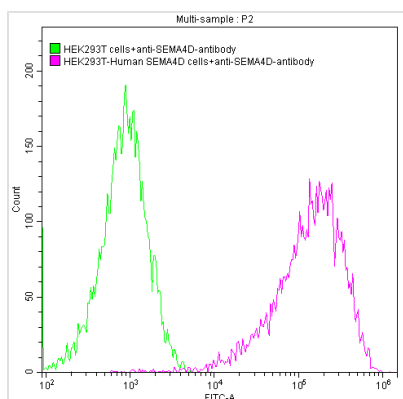




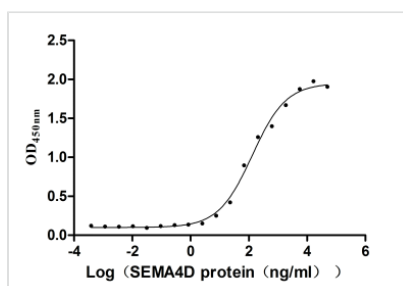
# SEMA4D Recombinant Monoclonal Antibody

<b>Product Code</b>	CSB-RA835707A1HU
<b>Storage</b>	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
<b>Uniprot No.</b>	Q92854
<b>Immunogen</b>	Recombinant Human SEMA4D protein
<b>Species Reactivity</b>	Human
<b>Tested Applications</b>	ELISA, FC; Recommended dilution: FC:1:50-1:200
<b>Form</b>	Liquid
<b>Conjugate</b>	Non-conjugated
<b>Storage Buffer</b>	Preservative: 0.03% Proclin 300 Constituents: 50% Glycerol, 0.01M PBS, PH 7.4
<b>Purification Method</b>	Affinity-chromatography
<b>Isotype</b>	hIgG4(S228P)
<b>Clonality</b>	Monoclonal
<b>Product Type</b>	Recombinant Antibody
<b>Immunogen Species</b>	Homo sapiens (Human)
<b>Research Area</b>	Neuroscience;Immunology
<b>Gene Names</b>	SEMA4D
<b>Clone No.</b>	21E8

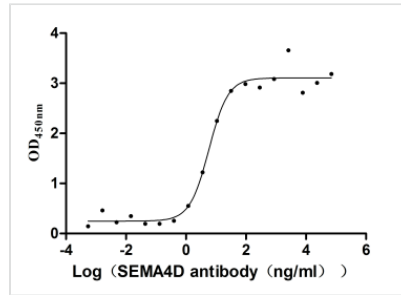
## Image



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



The Binding Activity of Mouse Sema4d with Anti-SEMA4D recombinant antibody.  
Activity: Measured by its binding ability in a functional ELISA. Immobilized Mouse Sema4d (CSB-MP020990MO) at 2  $\mu$ g/mL can bind Anti-SEMA4D recombinant antibody, the EC<sub>50</sub> is 98.14-174.8 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 EC<sub>50</sub> is 1.082-4.805 ng/mL.

## Description

The generation of the SEMA4D recombinant monoclonal antibody involves a series of steps. Initially, the SEMA4D monoclonal antibody is harvested and its gene sequence is determined. A vector containing the SEMA4D monoclonal antibody gene is subsequently constructed and transfected into a host cell line for culturing. The synthesis of the SEMA4D monoclonal antibody employs a recombinant human SEMA4D protein as an immunogen. Finally, the SEMA4D recombinant monoclonal antibody is purified through affinity chromatography and analyzed for specificity using ELISA and FC assays. It only reacts with human SEMA4D protein.

SEMA4D is a protein that belongs to the semaphorin family, which plays a crucial role in cell signaling and regulation of various physiological processes, including cell migration, axon guidance, and immune responses. SEMA4D acts as both a ligand and a receptor, interacting with a variety of other proteins, including plexin B1, CD72, CD100, and integrins. These interactions activate intracellular signaling pathways, leading to changes in cell behavior, such as cell adhesion, cell migration, proliferation, and survival. In the immune system, SEMA4D plays a role in regulating immune cell function. It can also modulate immune cell activity by regulating cytokine production, phagocytosis, and antigen presentation. SEMA4D has been implicated in various physiological and pathological processes, including cancer, inflammation, cardiovascular diseases, and neurological disorders.