

**Anti-SEMA4D / CD100 Reference Antibody (pepinemab)
Recombinant Antibody
Catalog # APR10174**

Specification

Anti-SEMA4D / CD100 Reference Antibody (pepinemab) - Product Information

Application	FC, E, FTA
Primary Accession	O92854
Reactivity	Human, Mouse
Clonality	Monoclonal
Isotype	IgG4SP
Calculated MW	145.88 KDa

Anti-SEMA4D / CD100 Reference Antibody (pepinemab) - Additional Information

Target/Specificity
SEMA4D / CD100

Endotoxin
< 0.001EU/ µg,determined by LAL method.

Conjugation
Unconjugated

Expression system
CHO Cell

Format
Purified monoclonal antibody supplied in PBS, pH6.0, without preservative.This antibody is purified through a protein A column.

Anti-SEMA4D / CD100 Reference Antibody (pepinemab) - Protein Information

Name SEMA4D

Synonyms C9orf164, CD100, SEMA4

Function
Cell surface receptor for PLXNB1 and PLXNB2 that plays an important role in cell-cell signaling (PubMed:20877282). Regulates GABAergic synapse development (By similarity). Promotes the development of inhibitory synapses in a PLXNB1-dependent manner (By similarity). Modulates the complexity and arborization of developing neurites in hippocampal neurons by activating PLXNB1 and interaction with PLXNB1 mediates activation of RHOA (PubMed:19788569). Promotes the migration of cerebellar granule cells (PubMed:16055703). Plays a role in the immune system; induces B-cells to aggregate and improves their viability (in vitro)

(PubMed:8876214).
Induces endothelial cell migration through the activation of PTK2B/PYK2, SRC, and the
phosphatidylinositol 3-kinase-AKT pathway (PubMed:16055703).

Cellular Location

Cell membrane; Single-pass type I membrane protein

Tissue Location

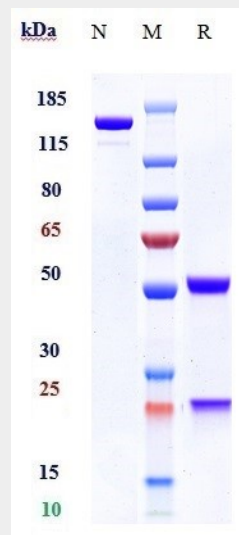
Strongly expressed in skeletal muscle, peripheral blood lymphocytes, spleen, and thymus and also expressed at lower levels in testes, brain, kidney, small intestine, prostate, heart, placenta, lung and pancreas, but not in colon and liver

Anti-SEMA4D / CD100 Reference Antibody (pepinemab) - Protocols

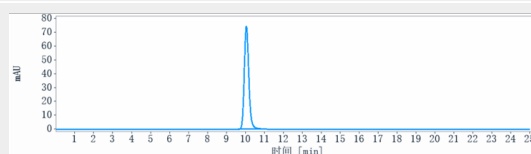
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-SEMA4D / CD100 Reference Antibody (pepinemab) - Images

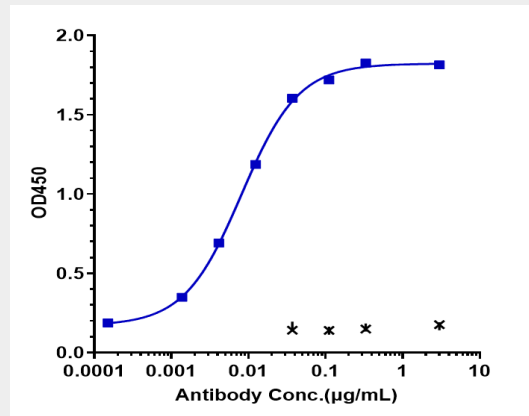


Anti-SEMA4D / CD100 Reference Antibody (pepinemab) on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%

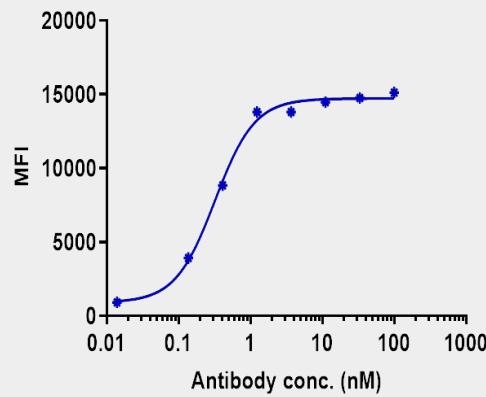


The purity of Anti-SEMA4D / CD100 Reference Antibody (pepinemab) is more than 100%

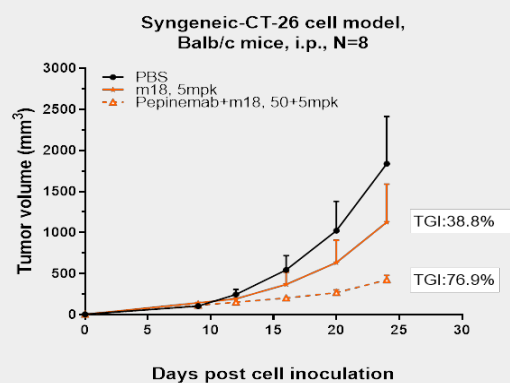
,determined by SEC-HPLC.



Immobilized human SEMA4D/CD100, His Tag at 2 µg/mL can bind Anti-SEMA4D / CD100 Reference Antibody (pepinemab) EC₅₀=0.0081 µg/mL



Human C100 HEK293 cells were stained with Anti-SEMA4D / CD100 Reference Antibody (pepinemab) and negative control protein respectively, washed and then followed by PE and analyzed with FACS, EC₂₃₁=0.3227 nM



Pepinemab inhibited the tumor growth of CT26 on balb/c mice. The result showed significant anti-tumor effects, with an tumor inhibition rate (TGI) of 76.9% at 50 mpk at D24.