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Anti-SEMA4D / CD100 Reference Antibody (pepinemab)

Recombinant Antibody
Catalog # APR10174

Product Information

Application	Functional assay, Kinetics (SPR), Kinetics (BLI), FACS, E, FTA
Primary Accession	Q92854
Clonality	Monoclonal
Isotype	Human IgG4
Calculated MW	96150

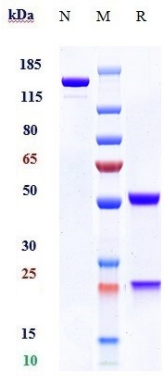
Additional Information

Target/Specificity	SEMA4D / CD100
Endotoxin	
Conjugation	Unconjugated
Expression system	CHO
Format	Purified monoclonal antibody supplied in PBS, pH6.0, without preservative.This antibody is purified through a protein A column.

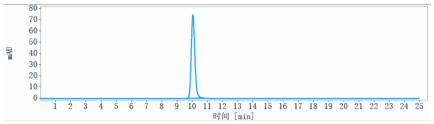
Protein Information

Name	SEMA4D
Synonyms	C9orf164, CD100, SEMAJ
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

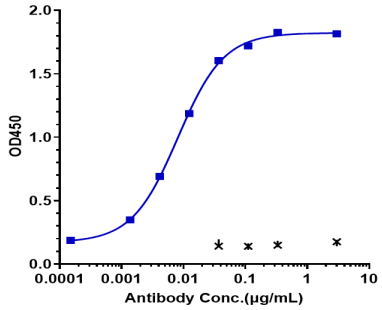
Images



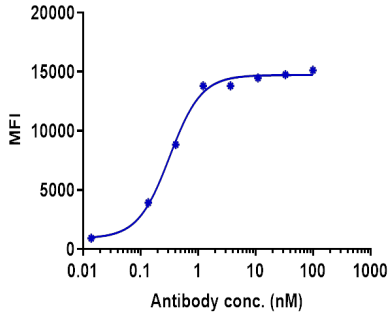
Anti - Human/Mouse CD100(Pepinemab) on SDS-PAGE under reducing (R) condition. The purity of the protein is greater than 95%.



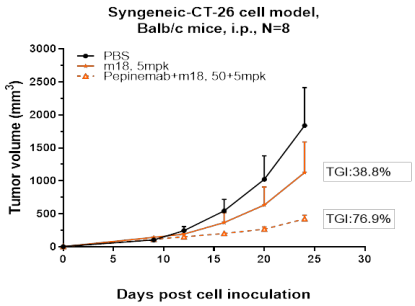
The purity of Anti - Human/Mouse CD100(Pepinemab) is 100%, determined by SEC-HPLC.



Immobilized human CD100 (His Tag, 2 μg/mL) can bind to Anti - Human/Mouse CD100(Pepinemab) with an EC50 of 0.0081 ug/mL.



Human CD100-expressing HEK293 cells were stained with Anti - Human/Mouse CD100(Pepinemab) , with isotype and secondary-only controls. Flow analysis showed specific binding of the antibody, with an EC50 of 0.3227 nM.



Anti - Human/Mouse CD100(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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.