

# Anti-SEMA4D / CD100 Reference Antibody (pepinemab)

Recombinant Antibody

Catalog # APR10174

## Product Information

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<b>Application</b>	FC, Kinetics, Animal Model
<b>Primary Accession</b>	<a href="#">Q92854</a>
<b>Reactivity</b>	Human, Mouse
<b>Clonality</b>	Monoclonal
<b>Isotype</b>	IgG4SP
<b>Calculated MW</b>	96150

## Additional Information

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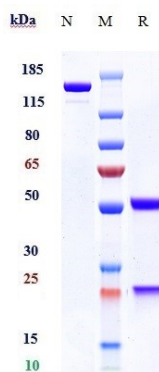
<b>Target/Specificity</b>	SEMA4D / CD100
<b>Endotoxin</b>	
<b>Conjugation</b>	Unconjugated
<b>Expression system</b>	CHO Cell
<b>Format</b>	Purified monoclonal antibody supplied in PBS, pH6.0, without preservative. This antibody is purified through a protein A column.

## Protein Information

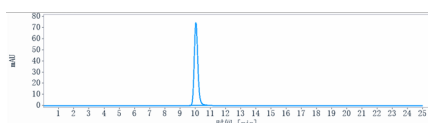
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<b>Name</b>	SEMA4D
<b>Synonyms</b>	C9orf164, CD100, SEMAJ
<b>Function</b>	Cell surface receptor for PLXNB1 and PLXNB2 that plays an important role in cell-cell signaling (PubMed: <a href="#">20877282</a> ). Regulates GABAergic synapse development (By 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: <a href="#">19788569</a> ). Promotes the migration of cerebellar granule cells (PubMed: <a href="#">16055703</a> ). Plays a role in the immune system; induces B-cells to aggregate and improves their viability (in vitro) (PubMed: <a href="#">8876214</a> ). Induces endothelial cell migration through the activation of PTK2B/PYK2, SRC, and the phosphatidylinositol 3-kinase-AKT pathway (PubMed: <a href="#">16055703</a> ).
<b>Cellular Location</b>	Cell membrane; Single-pass type I membrane protein
<b>Tissue Location</b>	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

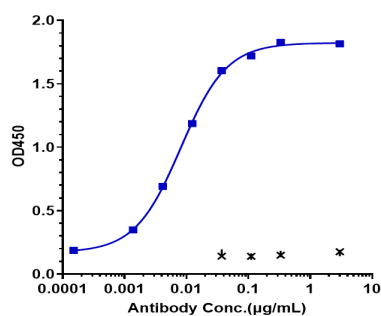
## Images



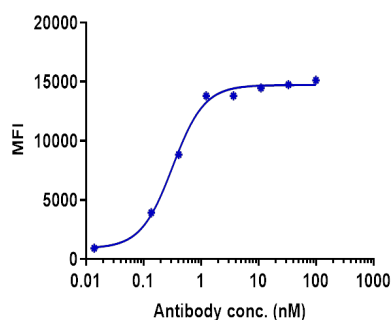
Anti-SEMA4D / CD100 Reference Antibody (pepinemab) on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%



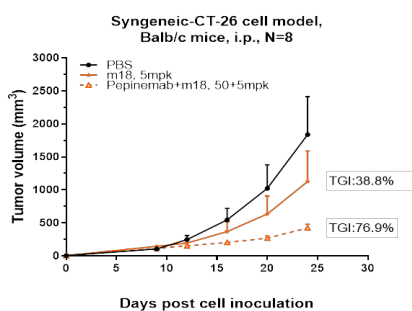
The purity of Anti-SEMA4D / CD100 Reference Antibody (pepinemab) is more than 100%, determined by SEC-HPLC.



Immobilized human SEMA4D/CD100, His Tag at 2 µg/mL can bind Anti-SEMA4D / CD100 Reference Antibody (pepinemab),  $EC_{50}=0.0081$  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,  $EC_{50}=0.3227$  nM



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