For Research Use Only

# SEMA3A Recombinant antibody, PBS Only Catalog Number:83579-5-PBS



**Basic Information** 

- Catalog Number: 83579-5-PBS Size: 100ug , Concentration: 1 mg/ml by Nanodrop; Source: Rabbit Isotype: IgG Immunogen Catalog Number: AG27173
- GenBank Accession Number: BC111416 GeneID (NCBI): 10371 UNIPROT ID: Q14563 Full Name: sema domain, immunoglobulin domain (Ig), short basic domain, secreted, (semaphorin) 3A Calculated MW: 771 aa, 89 kDa

Observed MW: 89 kDa Purification Method: Protein A purfication CloneNo.: 240509E3

### **Applications**

Tested Applications: WB, IHC, ELISA Species Specificity: human, rat

#### **Background Information**

SEMA3A (Semaphorin 3A), a class-3 semaphorin signaling protein, is involved in cell signaling with PlexinA1 and Neuropilin-1 (NRP1) receptors and it is responsible for recruiting dendritic cells into lymphatics. It's widely expressed in different tissues (PMID:10766232). SEMA3A has been shown to exert osteoprotective effects, characterized by increasing bone formation while inhibiting the activation of osteoclast precursor cells (PMID:36598593). However, SEMA3A also modulates the immune system. SEMA3A expression in a myocardial infarct area enhances macrophage polarization and inhibits monocyte migration into the lesion area (PMID:28540528).

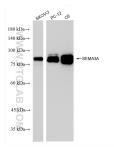
#### Storage

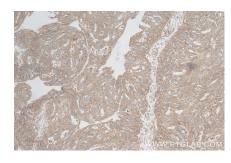
Storage: Store at -80°C. Storage Buffer: PBS Only

For technical support and original validation data for this product please contact:T: 1 (888) 4PTGLAB (1-888-478-4522) (toll freeE: proteintech@ptglab.comin USA), or 1(312) 455-8498 (outside USA)W: ptglab.com

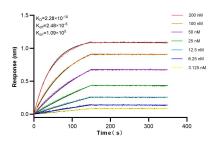
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## Selected Validation Data





Various lysates were subjected to SDS PAGE followed by western blot with 83579-5-RR (SEMA3A antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 83579-5-PBS in a different storage buffer formulation. Immunohistochemical analysis of paraffinembedded human ovary cancer tissue slide using 83579-5-RR (SEMA3A antibody) at dilution of 1:400 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 83579-5-PBS in a different storage buffer formulation.



Biolayer interferometry (BLI) kinetic assays of 83579-5-RR against Human SEMA3A were performed. The affinity constant is 0.228 nM.