

# Anti-Semaphorin-6A (cytoplasmic region) Antibody

Catalog # AN1949

# **Specification**

### Anti-Semaphorin-6A (cytoplasmic region) Antibody - Product Information

Application WB, IHC Primary Accession O9H2E6

Reactivity Bovine, Chicken, Drosophila, C.Elegans

Host Rabbit

Clonality Rabbit Polyclonal

Isotype IgG Calculated MW 114369

#### Anti-Semaphorin-6A (cytoplasmic region) Antibody - Additional Information

Gene ID **57556** 

**Dilution**WB~~1:1000
IHC~~1:100~500

#### **Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

### **Precautions**

Anti-Semaphorin-6A (cytoplasmic region) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

# **Shipping**

Blue Ice

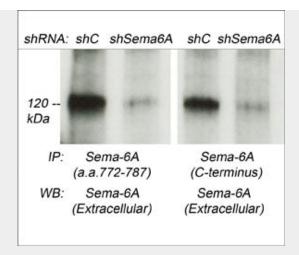
# Anti-Semaphorin-6A (cytoplasmic region) Antibody - Protocols

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

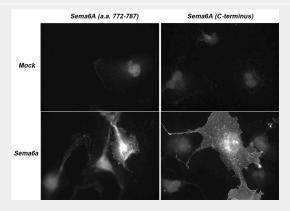
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## Anti-Semaphorin-6A (cytoplasmic region) Antibody - Images





Western blot of Sema-6A in human colorectal cancer (CRC) cells treated with control (shC) or Sema-6A (shSema6A) shRNAs. Sema-6A was immunoprecipitated from each of the CRC lysates using Sema-6A (a.a. 772-787) or Sema-6A (C-terminus) antibody, then the blotted immunoprecipitations were probed with Sema-6A antibody. (Images provided by Dr. Luca Tamagnone from the IRCC, Univ. of Torino, Italy).



Immunocytochemical labeling of Sema-6A in COS7 cells that were mock transfected (top images) or Sema-6A transfected (bottom images). The cells were labeled with anti-Sema-6A (a.a. 772-787) (Left top and bottom image) or anti-Sema-6A (C-terminus) (Right top and bottom image). The antibodies were detected using anti-rabbit fluorescent secondary antibody. (Images provided by Dr. Luca Tamagnone from the IRCC, University of Torino, Italy).

#### Anti-Semaphorin-6A (cytoplasmic region) Antibody - Background

The Semaphorin family of axon guidance molecules includes secreted, transmembrane, and GPI-anchored extracellular molecules that have been implicated in neuron development, vascular disease, and tumor progression. There are eight classes of semaphorin genes, all of which are characterized by a conserved 500 amino acid, cystine-rich Sema domain. Semaphorin 6A (Sema-6A) is a single-pass type I membrane protein that contains a plexin-semaphorin-integrin (PSI) domain and a Sema domain. Sema-6A is active as a homodimer or oligomer. The Sema-6A homodimer interacts with a Plexin A2 homodimer. Sema-6a promotes reorganization of the actin cytoskeleton to regulate normal granule cell migration in the developing cerebellum and to control axon guidance in the developing central nervous system. In addition, Sema-6a has been implicated in oligodendrocyte myelination and may alter VEGF signaling during angiogenesis.