

### Anti-Semaphorin-3A (N-terminal) Antibody

Catalog # AN1945

# **Specification**

# Anti-Semaphorin-3A (N-terminal) Antibody - Product Information

Application WB
Primary Accession Q14563
Reactivity Bovine
Host Rabbit

Clonality Rabbit Polyclonal

Isotype IgG Calculated MW 88889

# Anti-Semaphorin-3A (N-terminal) Antibody - Additional Information

Gene ID 10371

**Other Names** 

Sema3A, Semaphorin III

Dilution

WB~~1:1000

### 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-3A (N-terminal) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## **Shipping**

Blue Ice

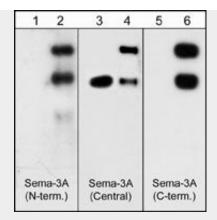
# Anti-Semaphorin-3A (N-terminal) Antibody - Protocols

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

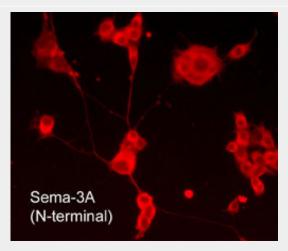
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

## Anti-Semaphorin-3A (N-terminal) Antibody - Images





Western blots of neonatal rat brain (lanes 1, 3 & 5) and human recombinant Sema3A/Fc chimera (95/125 kDa) (lanes 2, 4 & 6). Blots were probed with anti-Sema3A (SP1401) (lanes 1 & 2), anti-Sema3A (SP1221) (lanes 3 & 4) and anti-Sema3A (SP1241) (lane 5 & 6). The antibodies recognize both the 95 kDa and 125 kDa forms of the recombinant Sema3A.



Immunocytochemical labeling of Sema-3A in aldehyde-fixed and NP-40-permeabilized NGF-differentiated PC12 cells. The cells were labeled with rabbit polyclonal Sema-3A (N-terminal) antibody (SP1401), then the antibody was detected using appropriate secondary antibody conjugated to DyLight® 594.

### Anti-Semaphorin-3A (N-terminal) Antibody - Background

One family of inhibitory axon guidance molecules is the semaphorins. The semaphorins include secreted, transmembrane, and GPI-anchored extracellular molecules that are involved in regulating axon guidance by inhibiting axons from growing toward incorrect targets. Semaphorin 3A (Sema3A) may play a particularly interesting role in limiting axon regeneration since it is expressed in meningeal fibroblasts that invade the injured spinal cord and surround the glial scar. In addition, the Sema3A co-receptors, Neuropilin-1 and Plexin-A1, are expressed on axons that regenerate up to the injured region, but do not cross this Sema3A-containing region. Thus, Sema3A and its co-receptors may have important roles in regulating axon guidance during neuronal development and after neuronal injury.