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Datasheet for ABIN5519059

## anti-SEMA3A antibody (AA 21-223)

1 Image

1 Publication

### Overview

Quantity:	100 µg
Target:	SEMA3A
Binding Specificity:	AA 21-223
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Application:	Western Blotting (WB), ELISA

### Product Details

Purpose:	Rabbit IgG polyclonal antibody for Semaphorin 3A detection. Tested with WB, Direct ELISA in Human, Mouse, Rat.
Immunogen:	E. coli-derived huamn Semaphorin 3A recombinant protein (Position: N21-D223).
Isotype:	IgG
Cross-Reactivity (Details):	No cross reactivity with other proteins.
Characteristics:	Rabbit IgG polyclonal antibody for Semaphorin 3A detection. Tested with WB, Direct ELISA in Human, Mouse, Rat. Gene Name: semaphorin 3A Protein Name: Semaphorin-3A
Purification:	Immunogen affinity purified.

## Target Details

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Target:	SEMA3A
Alternative Name:	SEMA3A ( <a href="#">SEMA3A Products</a> )
Background:	<p>SEMA3A is also known as COLL1, SEMA1 or SEMAL. This gene is a member of the semaphorin family and encodes a protein with an Ig-like C2-type (immunoglobulin-like) domain, a PSI domain and a Sema domain. This secreted protein can function as either a chemorepulsive agent, inhibiting axonal outgrowth, or as a chemoattractive agent, stimulating the growth of apical dendrites. In both cases, the protein is vital for normal neuronal pattern development. Increased expression of this protein is associated with schizophrenia and is seen in a variety of human tumor cell lines. Also, aberrant release of this protein is associated with the progression of Alzheimer's disease.</p> <p>Synonyms: Semaphorin-3A, Semaphorin III, Sema III, SEMA3A, SEMAD</p>
Gene ID:	10371
UniProt:	<a href="#">Q14563</a>
Pathways:	<a href="#">Regulation of Cell Size</a>

## Application Details

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Application Notes:	<p>Notes: Tested Species: Species with positive results.</p> <p>Other applications have not been tested. Optimal dilutions should be determined by end users.</p>
Comment:	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (ABIN921124) for Western blot.
Restrictions:	For Research Use only

## Handling

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Format:	Lyophilized
Reconstitution:	Add 0.2 mL of distilled water will yield a concentration of 500 µg/mL.
Concentration:	500 µg/mL
Buffer:	Each vial contains 5 mg BSA, 0.9 mg NaCl, 0.2 mg Na <sub>2</sub> HPO <sub>4</sub> , 0.05 mg Sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

## Handling

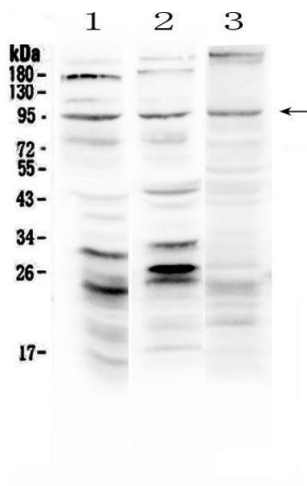
Storage: 4 °C,-20 °C

Storage Comment: At -20°C for one year. After reconstitution, at 4°C for one month.  
It can also be aliquotted and stored frozen at -20 °C for a longer time. Avoid repeated freezing and thawing.

## Publications

Product cited in: Hsu, Katz, Ix, de Boer, Kestenbaum, Shlipak: "Association of fibroblast growth factor-23 with arterial stiffness in the Multi-Ethnic Study of Atherosclerosis." in: **Nephrology, dialysis, transplantation : official publication of the European Dialysis and Transplant Association - European Renal Association**, Vol. 29, Issue 11, pp. 2099-105, (2015) ([PubMed](#)).

## Images



### Western Blotting

**Image 1.** Western blot analysis of Semaphorin 3A using anti-Semaphorin 3A antibody . Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each Lane was loaded with 50ug of sample under reducing conditions. Lane 1: rat brain tissue lysates, Lane 2: mouse brain tissue lysates, Lane 3: human U-87MG whole cell lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-Semaphorin 3A antigen affinity purified polyclonal antibody (Catalog # ) at 0.5 ug/mL overnight at 4â„ƒ, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for Semaphorin 3A at

approximately 95KD. The expected band size for Semaphorin 3A is at 89KD.