

## Anti-Semaphorin 3A/SEMA3A Antibody Picoband™

Catalog Number: A01761-1

### About SEMA3A

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.

### Overview

|                      |   |
|----------------------|---|
| Product Name         | Anti-Semaphorin 3A/SEMA3A Antibody Picoband™  |
| Reactive Species     | Human, Mouse, Rat   |
| Description          | Boster Bio Anti-Semaphorin 3A/SEMA3A Antibody Picoband™ catalog # A01761-1. Tested in ELISA, WB applications. This antibody reacts with Human, Mouse, Rat.  |
| Application          | ELISA, WB   |
| Clonality            | Polyclonal  |
| Formulation          | Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na <sub>2</sub> HPO <sub>4</sub> , 0.05mg NaN <sub>3</sub> .  |
| Storage Instructions | Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles. |
| Host                 | Rabbit  |
| Uniprot ID           | SEMA3A: Q14563  |

### Technical Details

|                               |   |
|-------------------------------|---|
| Immunogen                     | E. coli-derived human Semaphorin 3A recombinant protein (Position: N21-D223).                   |
| Predicted Reactive Species    | Human   |
| Recommended Detection Systems | Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot. |
| Cross Reactivity              | No cross-reactivity with other proteins.  |
| Isotype                       | Rabbit IgG  |
| Form                          | Lyophilized   |
| Concentration                 | Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.                       |

|                     |   |
|---------------------|---|
| Purification        | Immunogen affinity purified.  |
| Suggested Dilutions | <p>Dilute the sample so that the expected range of concentrations fall within the detection range of this kit.</p> <p>If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples.</p> <p>Some PubMed article(s) citing the expression level of this target are as follows:</p> <p>Boster Bio's internal QC testing used:</p> <p>Western blot, 0.1-0.5ug/ml</p> <p>Direct ELISA, 0.1-0.5ug/ml</p> |

## Anti-Semaphorin 3A/SEMA3A Antibody Picoband™ (A01761-1) Images

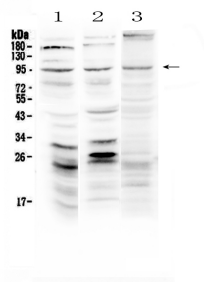


Figure 1. Western blot analysis of Semaphorin 3A using anti-Semaphorin 3A antibody (A01761-1).

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 # A01761-1) at 0.5 ug/mL overnight at 4 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.

## 1 Publications Citing This Product

1. PubMed ID: 24765144, Zhou H, Wu A, Fu W, Lv Z, Zhang Z. Oncol Lett. 2014 May;7(5):1395-1400. Epub 2014 Feb 27. Significance Of Semaphorin-3A And Mmp-14 Protein Expression In Non-Small Cell Lung Cancer.

Visit [bosterbio.com/anti-semaphorin-3a-picoband-trade-antibody-a01761-1-boster.html](http://bosterbio.com/anti-semaphorin-3a-picoband-trade-antibody-a01761-1-boster.html) to see all 1 publications.

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