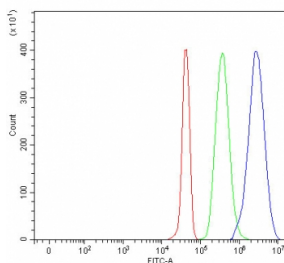


## Semaphorin 4A Antibody / SEMA4A / Sema B (RQ8233)

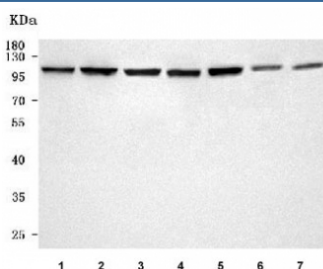
| Catalog No. | Formulation   | Size   |
|-------------|---|--------|
| RQ8233      | 0.5mg/ml if reconstituted with 0.2ml sterile DI water | 100 ug |

**Bulk quote request**

|                           |  |
|---------------------------|--|
| <b>Availability</b>       | 1-3 business days  |
| <b>Species Reactivity</b> | Human, Mouse, Rat  |
| <b>Format</b>             | Antigen affinity purified  |
| <b>Host</b>               | Rabbit   |
| <b>Clonality</b>          | Polyclonal (rabbit origin)   |
| <b>Isotype</b>            | Rabbit IgG   |
| <b>Purity</b>             | Antigen affinity purified  |
| <b>Buffer</b>             | Lyophilized from 1X PBS with 2% Trehalose  |
| <b>UniProt</b>            | Q9H3S1   |
| <b>Applications</b>       | Western Blot : 0.5-1ug/ml<br>Flow Cytometry : 1-3ug/million cells<br>Direct ELISA : 0.1-0.5ug/ml |
| <b>Limitations</b>        | This Semaphorin 4A antibody is available for research use only.                                  |



Flow cytometry testing of fixed and permeabilized human JK cells with Semaphorin 4A antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= Semaphorin 4A antibody.



Western blot testing of 1) human HeLa, 2) human Jurkat, 3) human RT4, 4) rat thymus, 5) rat PC-12, 6) mouse thymus and 7) mouse ANA-1 cell lysate with Semaphorin 4A antibody. Predicted molecular weight ~84 kDa but may be observed at higher molecular weights due to glycosylation.

## Description

Semaphorin-4A is a protein that in humans is encoded by the SEMA4A gene. This gene encodes a member of the semaphorin family of soluble and transmembrane proteins. Semaphorins are involved in numerous functions, including axon guidance, morphogenesis, carcinogenesis, and immunomodulation. The encoded protein is a single-pass type I membrane protein containing an immunoglobulin-like C2-type domain, a PSI domain and a sema domain. It inhibits axonal extension by providing local signals to specify territories inaccessible for growing axons. It is an activator of T-cell-mediated immunity and suppresses vascular endothelial growth factor (VEGF)-mediated endothelial cell migration and proliferation in vitro and angiogenesis in vivo. Mutations in this gene are associated with retinal degenerative diseases including retinitis pigmentosa type 35 (RP35) and cone-rod dystrophy type 10 (CORD10). Multiple alternatively spliced transcript variants encoding different isoforms have been identified.

## Application Notes

Optimal dilution of the Semaphorin 4A antibody should be determined by the researcher.

## Immunogen

E. coli-derived recombinant human protein (amino acids R81-N754) was used as the immunogen for the Semaphorin 4A antibody.

## Storage

After reconstitution, the Semaphorin 4A antibody can be stored for up to one month at 4°C. For long-term, aliquot and store at -20°C. Avoid repeated freezing and thawing.