

Human Semaphorin 4B Alexa Fluor® 488-conjugated Antibody

Antigen Affinity-purified Polyclonal Goat IgG Catalog Number: AF5485G 100 µg

| DESCRIPTION | |
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| Species Reactivity | Human |
| Specificity | Detects human Semaphorin 4B in direct ELISAs and Western blots. In direct ELISAs, approximately 15% cross-reactivity with recombinant mouse Semaphorin 4B is observed and less than 1% cross-reactivity with recombinant human (r |
| Source | Polyclonal Goat IgG |
| Purification | Antigen Affinity-purified |
| Immunogen | Mouse myeloma cell line NS0-derived recombinant human Semaphorin 4B isoform 1 Leu39-Glu712 Accession # Q9NPR2 |
| Conjugate | Alexa Fluor 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 nm |
| Formulation | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide |
| | *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Shee (SDS) for additional information and handling instructions. |

| APPLICATIONS | | |
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| Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website. | | |
| CyTOF-ready | Optimal dilution of this antibody should be experimentally determined. | |
| Western Blot | Optimal dilution of this antibody should be experimentally determined. | |
| Flow Cytometry | Optimal dilution of this antibody should be experimentally determined. | |

| PREPARATION AND STORAGE | |
|-------------------------|---|
| Shipping | The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below. |
| Stability & Storage | Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied |

BACKGROUND

Semaphorin 4B (Sema4B; also SemaC) is a 95-100 kDa, class IV member of the Semaphorin family of proteins. It is expressed in neurons, and following PSD-95 induced clustering, participates in the formation or functioning of glutamatergic synapses. Mature human Sema4B is a type I transmembrane glycoprotein that is 794 amino acids (aa) in length. It contains a 674 aa extracellular region (aa 39-832) that is characterized by one Sema domain (aa 65-502), a PSI region (aa 520-574), and an Ig-like C2-type domain (aa 599-658). There is one potential soluble splice variant that shows a 29 aa substitution for aa 707-832. Over aa 39-712, human Sema4B shares 86% aa identity with mouse Sema4B.

PRODUCT SPECIFIC NOTICES

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