

#### DESCRIPTION

|                           |                                                                                                                                                                                                                                                                             |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b> | Mouse/Rat                                                                                                                                                                                                                                                                   |
| <b>Specificity</b>        | Detects mouse and rat Semaphorin 4C in Western blots. In direct ELISAs, less than 20% cross-reactivity with recombinant human Semaphorin 4C and less than 5% cross-reactivity with recombinant mouse (rm) Semaphorin 4B, rmSemaphorin 4D, a                                 |
| <b>Source</b>             | Polyclonal Sheep IgG                                                                                                                                                                                                                                                        |
| <b>Purification</b>       | Antigen Affinity-purified                                                                                                                                                                                                                                                   |
| <b>Immunogen</b>          | Mouse myeloma cell line NS0-derived recombinant mouse Semaphorin 4C<br>Glu22-Gly664<br>Accession # Q64151                                                                                                                                                                   |
| <b>Conjugate</b>          | Alexa Fluor 488<br>Excitation Wavelength: 488 nm<br>Emission Wavelength: 515-545 nm                                                                                                                                                                                         |
| <b>Formulation</b>        | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide<br><br>*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions. |

#### APPLICATIONS

**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.

|                             |                                                                        |
|-----------------------------|------------------------------------------------------------------------|
| <b>Western Blot</b>         | Optimal dilution of this antibody should be experimentally determined. |
| <b>Immunocytochemistry</b>  | Optimal dilution of this antibody should be experimentally determined. |
| <b>Immunohistochemistry</b> | Optimal dilution of this antibody should be experimentally determined. |

#### PREPARATION AND STORAGE

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

#### BACKGROUND

Sema4C (Semaphorin 4C; also Sema I and M-SemaF) is a 100-105 kDa, class IV member of the semaphorin family of proteins. It is expressed by precursors to neurons and myocytes, and may regulate their differentiation into mature forms. Mature mouse Sema4C is a type I transmembrane glycoprotein that is 814 amino acids (aa) in length. It contains a 644 aa extracellular region (aa 21-664) that is characterized by the presence of one Sema domain (aa 30-497), a PSI region (aa 499-552), and an Ig-like C2-type domain (aa 557-645). The cytoplasmic region interacts with PZD-domain containing proteins. Over aa 21-664, mouse Sema4C shares 85% and 95% aa identity with human and rat Sema4C, respectively.

#### PRODUCT SPECIFIC NOTICES

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