

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse Semaphorin 4G in direct ELISAs and Western blots. In direct ELISAs, approximately 20% cross-reactivity with recombinant human Semaphorin 4G is observed, and less than 1% cross-reactivity with recombinant mouse (rm) Semaphorin 4B, rmSemaphori
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse Semaphorin 4G Val18-Met673 Accession # Q9WUH7
Conjugate	Alexa Fluor 700 Excitation Wavelength: 675-700 nm Emission Wavelength: 723 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 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.

Western Blot	Optimal dilution of this antibody should be experimentally determined.
Immunohistochemistry	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 4G (Sema4G) is a 92 kDa (predicted), class IV member of the semaphorin family of proteins. It is expressed by select cell types, including oligodendroglia and Purkinje neurons, and likely acts as a chemorepellent by binding to B-type plexins. Mature mouse Sema4G is a type I transmembrane protein that is 820 amino acids (aa) in length. It contains a 656 aa extracellular region (aa 18-673) that is characterized by one Sema domain (aa 35-503), a PSI region (aa 505-556), and an Ig-like C2-type domain (aa 565-648). The 143 aa cytoplasmic region contains a poly-proline segment and a Ser phosphorylation site. Over aa 18-673, mouse Sema4G shares 91% and 97% aa identity with human and rat Sema4G, respectively.

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