

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse Semaphorin 6A in direct ELISAs and Western blots. In direct ELISAs, approximately 40% cross-reactivity with recombinant human (rh) Semaphorin 6A is observed and no cross-reactivity with recombinant mouse Semaphorins 3C, 3E, 3F or 7A, or rhSemaphorins 3A, or 3B is observed.
Source	Monoclonal Rat IgG _{2A} Clone # 201932
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>S. frugiperda</i> insect ovarian cell line Sf 21-derived recombinant mouse Semaphorin 6A Gly19-Thr649 Accession # O35464
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

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.

	Recommended Concentration	Sample
Western Blot	1 µg/mL	Recombinant Mouse Semaphorin 6A
Immunohistochemistry	8-25 µg/mL	Perfusion fixed frozen sections of mouse brain (medulla) and mouse embryo

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Semaphorin 6A (Sema6A) is a member of the class 6 semaphorin family of type I transmembrane proteins important in axon guidance during neuronal development. Class 6 semaphorins mediate bidirectional signaling, in part through interaction with plexin A1. In addition to neuronal expression, Semaphorin 6A is induced by IFN-γ in Langerhans cells. Mature mouse and human Semaphorin 6A extracellular domains share 95% amino acid sequence identity.