

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse Slit3 in direct ELISAs. In direct ELISAs, no cross-reactivity with recombinant mouse (rm) Slit1, rmSlit2, or recombinant human Slit3 is observed.
Source	Monoclonal Rat IgG _{2B} Clone # 782619
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse Slit3 Ser27-His901 Accession # Q9WVB4
Conjugate	Alexa Fluor 594 Excitation Wavelength: 590 nm Emission Wavelength: 617 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.

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

Slit3 is a member of the slit family of large secreted axon guidance molecules that are ligands for Robo receptors (1). Like other mammalian family members, the 1523 amino acid (aa), 200 kDa Slit3 contains a signal sequence followed by 23 leucine-rich repeats (LRR) and nine EGF-like sequences (1). Mammalian Slits also contain a laminin-G domain between EGF6 and EGF7, and a C-terminal cysteine-rich domain (1). In *Drosophila* Slit, specific LRR are sites of ROBO interaction and homodimerization (2). *Drosophila* Slit shows equal similarities with all three mouse slit proteins, which are 59-66% identical with each other (1). During development, Slit3 is expressed in the ventral neural tube, developing sensory organs, limb buds and developing areas of the limbs in patterns that overlap with but are discrete from Slit1 and Slit2 (1). Axons will not be allowed to recross the floor plate unless all three Slit genes are disrupted, suggesting some overlap in function (3). Slit3 is also expressed in the lung, kidney, skeletal muscle and heart, both during development and postnatally (1, 4-6). ROBO2 is often found in complementary areas (4). Mice with genetically disrupted Slit3 have thin diaphragms with disorganized collagen fibrils and frequently develop diaphragmatic hernias (5, 6). Abnormalities in kidney development may also occur (5). Although Slit proteins are generally considered to be secreted, significant amounts of Slit3 may be retained in the mitochondria because of features in the signal sequence that indicate a high probability of mitochondrial targeting (7). Secreted Slit is often membrane-associated (7). Mouse Slit3 shows 98% and 94% amino acid identity with rat and human Slit3, respectively.

PRODUCT SPECIFIC NOTICES

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