

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 647 Excitation Wavelength: 650 nm Emission Wavelength: 668 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

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc., and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.