

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Slit2 in direct ELISAs.
Source	Monoclonal Mouse IgG _{2A} Clone # 984724
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Human embryonic kidney cell line HEK293-derived recombinant human Slit2 Thr1122-Ser1529 Accession # O94813-1
Conjugate	Alexa Fluor 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 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.

ELISA 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

Slit Homolog 2 (Slit2) is a member of the Slit family of secreted extracellular matrix glycoproteins that are best known for their role in axon guidance (1). It is widely expressed in the developing and adult brain and spinal cord, as well as in fetal lung and kidney, and the adult adrenal gland, thyroid gland, and trachea (1-3). Slit2 is composed of multiple domains including seven EGF-like domains, twenty Leucine-rich repeats (LRRs), one Laminin G-like domain, one C-terminal cysteine knot-like (CTCK) domain, and four N-terminal and four C-terminal LRR domains (1, 3). Slit2 has a molecular weight of approximately 200 kDa (4). However, proteolytic cleavage between the fifth and sixth EGF-like domains produces a membrane-bound 140 kDa N-terminal protein, termed Slit2-N, and a 55-60 kDa C-terminal fragment, termed Slit2-C (4, 5). Mature human Slit2 shares 96% amino acid sequence identity with the mouse and rat orthologs. Slit2 has been shown to have various important functions in the nervous system. Slit2 induces growth cone collapse, inhibits oligodendrocyte precursor cell migration, and promotes axon elongation, branch formation, and fasciculation (5-9). Slit2 C-terminal fragment can mediate axon guidance through binding to Plexin A1 receptor (10). Slit2-C has also been shown to bind to Glypican-1 and promote motor axon migration (5). Outside the nervous system, C-terminal fragment of Slit2 activates a thermogenic PKA pathway in adipocytes and improves glucose homeostasis (11).

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.