

DESCRIPTION

Species Reactivity	Human/Mouse
Specificity	Stains human and mouse Slit2 transfectants but not irrelevant transfectants in flow cytometry.
Source	Monoclonal Rat IgG _{2B} Clone # 710305
Purification	Protein A or G purified from cell culture supernatant
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant mouse Slit2 Gln26-Gln900 Accession # Q9R1B9
Conjugate	Alexa Fluor 647 Excitation Wavelength: 650 nm Emission Wavelength: 668 nm
Formulation	Supplied 0.2 mg/mL in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details. *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.

	Recommended Concentration	Sample
Flow Cytometry	0.25-1 µg/10 ⁶ cells	CHO Chinese hamster ovary cell line transfected with human or mouse Slit2

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. <ul style="list-style-type: none"> 12 months from date of receipt, 2 to 8 °C as supplied.

BACKGROUND

Slit2 is a 180-210 kDa secreted member of the SLIT family of proteins. It is expressed in select sites in the embryo (via glia, motoneurons and posterior sclerotome mesoderm), and found in discrete adult cell types such as preosteoblasts, monocytes, granulose lutein cells, and likely keratinocytes. Slit2 binds to multiple receptors, including ROBO-1 thru -4, Laminin-1, Dan, Gremlin and Netrin-1. Depending upon the target, Slit2 can promote a number of diverse effects, including both growth cone collapse and outgrowth, inhibition of dendritic cell migration, and axon repulsion. Mature mouse Slit2 is 1496 amino acids (aa) in length (aa 26-1521). It contains multiple intermingled domains, including nine EGF-like domains, 20 Leu-rich repeats (LRRs), one laminin G-like and CTCK (C-terminal Cys knot-like) domain, and eight total C- plus N-terminal LRRs. There are two potential isoform splice variants. One contains a four aa insertion after Ser258, while another possesses the same insertion after Ser258 coupled to both an eight aa insertion after Ser479 and a nine aa insertion after Thr1021. Slit2 apparently undergoes proteolytic cleavage after Arg1113. This generates a 140-150 kDa N-terminal protein, and a 55-60 kDa C-terminal fragment. This processing does not inactivate Slit2. Rather, it creates molecules with distinct activities. For example, the N-terminal fragment will bind ROBO1 and repel motor axon migration, while the C-terminal fragment won't bind ROBO1, but will bind glypican-1 and promote motor axon migration. Over aa 26-900, mouse Slit2 shares 99% and 97% aa sequence identity with rat and human Slit2, respectively.

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