

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse Slit2 in direct ELISAs. In direct ELISAs, less than 50% cross-reactivity with recombinant human (rh) Slit2, rhSlit1 and recombinant mouse (rm) Slit1 is observed, less than 10% cross-reactivity with rmSlit3 and rhSlit3 is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant mouse Slit2 Gln26-Gln900 Accession # Q9R1B9
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.

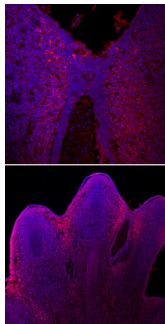
APPLICATIONS

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
Immunohistochemistry	5-15 µg/mL	See Below

DATA

Immunohistochemistry



Slit2 in Embryonic Mouse Hindlimb. Slit2 was detected in immersion fixed frozen sections of E13.5 mouse hindlimb, shown localized to interdigital region (upper panel), using Sheep Anti-Mouse Slit2 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5444) at 10 µg/mL overnight at 4 °C. Tissue was stained using the NorthernLights™ 557-conjugated Anti-Sheep IgG Secondary Antibody (red; Catalog # NL010) and counterstained with DAPI (blue). Specific staining was localized to cell surfaces and cytoplasm. View our protocol for [Fluorescent IHC Staining of Frozen Tissue Sections](#).

PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.2 mg/mL.
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

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 ROBO-1 and repel motor axon migration, while the C-terminal fragment won't bind ROBO-1, 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.