# Human SLITRK5 Biotinylated Antibody

Antigen Affinity-purified Polyclonal Goat IgG
Catalog Number: BAF2587

## DESCRIPTION

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| **Species Reactivity** | Human |
| **Specificity** | Detects human SLITRK5 in Western blots. |
| **Source** | Polyclonal Goat IgG |
| **Purification** | Antigen Affinity-purified |
| **Immunogen** | Mouse myeloma cell line NS0-derived recombinant human SLITRK5<br>Glu39-Val665<br>Accession # O94991 |
| **Formulation** | Lyophilized from a 0.2 μm filtered solution in PBS with BSA as a carrier protein. See Certificate of Analysis for details. |

## 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 |
|---|---|---|
| **Western Blot** | 0.1 µg/mL | Recombinant Human SLITRK5 (Catalog # 2587-SK) |

## PREPARATION AND STORAGE

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| **Reconstitution** | Reconstitute at 0.2 mg/mL in sterile PBS. |
| **Shipping** | The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. |
| **Stability & Storage** | **Use a manual defrost freezer and avoid repeated freeze-thaw cycles.**<br>● 12 months from date of receipt, -20 to -70 °C as supplied.<br>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.<br>● 6 months, -20 to -70 °C under sterile conditions after reconstitution. |

## BACKGROUND

SLITRK5 (Slit and Trk-like family member 5; also named LRR-containing protein 11) is a member of the SLITRK family of proteins (1, 2). This family currently includes six members, all of which contain a slit-like extracellular region and (save for SLITRK1) a Trk-like cytoplasmic region (3). Human SLITRK5 is a type I transmembrane (TM) protein that is 958 amino acids (aa) in length. It contains a putative 40 aa signal sequence, a 624 aa extracellular domain (ECD), a 21 aa TM segment, and a 273 aa cytoplasmic region. The ECD is characterized by the presence of two leucine-rich domains (LRD) that resemble those found in slit. Each LRD (aa 80-285 plus aa 384-579) contains seven and eight leucine-rich repeats (LRRs), respectively. The exact function of the LRRs is not known. Based on other LRRs, it might be assumed that they mediate protein-protein-interaction (4). The cytoplasmic region contains two conserved, potential phosphorylation sites at Tyr833 and Tyr917, plus a TrkA-like tyrosine phosphorylation site (YLxxL) at Tyr945. SLITRK5 is expressed on embryonic neurons of the hippocampus (pyramidal layer) and thalamus (3). Based on SLITRK2 studies, SLITRK5 will block neurite extension (3). Human SLITRK5 shares 97% and 98% aa identity with mouse and canine SLITRK5, respectively.

**References:**


1. Aruga, J. *et al.* (2003) Gene **315**:87.
2. Nagase, T. *et al.* (2001) DNA Res. **8**:179.
3. Aruga, J. and K. Mikoshiba (2003) Mol. Cell. Neurosci. **24**:117.
4. Enkhbayar, P. *et al.* (2003) Proteins **54**:394.




Global bio-techne.com info@bio-techne.com techsupport@bio-techne.com TEL +1 612 379 2956
USA TEL 800 343 7475 Canada TEL 855 668 8722 China TEL +86 (21) 52380373
Europe | Middle East | Africa TEL +44 (0)1235 529449