

**Slitrk1 Antibody**  
**Catalog # ASC10637****Specification**

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**Slitrk1 Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">Q96PX8</a>
Other Accession	<a href="#">NP_443142</a> , <a href="#">114798</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Application Notes	Slitrk1 antibody can be used for detection of Slitrk1 by Western blot at 1 - 2 µg/mL. Antibody can also be used for immunohistochemistry starting at 2.5 µg/mL. For immunofluorescence start at 20 µg/mL.

**Slitrk1 Antibody - Additional Information**Gene ID **114798****Target/Specificity**

Slitrk1 antibody was raised against a 18 amino acid synthetic peptide from near the center of human Slitrk1.<br><br>The immunogen is located within amino acids 270 - 320 of Slitrk1.

**Reconstitution & Storage**

Slitrk1 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

**Precautions**

Slitrk1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Slitrk1 Antibody - Protein Information****Name** SLITRK1**Synonyms** KIAA1910, LRRC12**Function**

It is involved in synaptogenesis and promotes excitatory synapse differentiation (PubMed:<a href="http://www.uniprot.org/citations/27273464" target="\_blank">27273464</a>, PubMed:<a href="http://www.uniprot.org/citations/27812321" target="\_blank">27812321</a>). Enhances neuronal dendrite outgrowth (PubMed:<a href="http://www.uniprot.org/citations/16224024" target="\_blank">16224024</a>, PubMed:<a href="http://www.uniprot.org/citations/19640509" target="\_blank">19640509</a>).

**Cellular Location**

Membrane; Single-pass type I membrane protein. Secreted Synapse  
{ECO:0000250|UniProtKB:Q810C1}

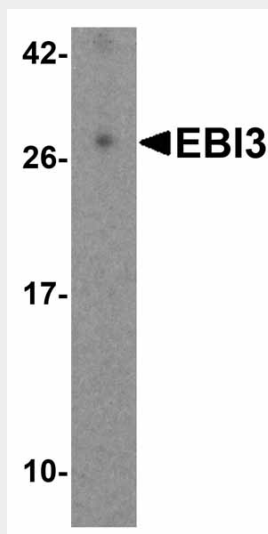
**Tissue Location**

Expressed predominantly in the frontal lobe of the cerebral cortex of the brain. Also expressed in some astrocytic brain tumors such as astrocytomas, oligodendrogliomas, glioblastomas, gangliogliomas and primitive neuroectodermal tumors

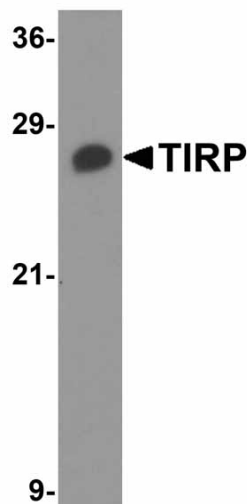
**Slitrk1 Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**Slitrk1 Antibody - Images**

Western blot analysis of EBI3 in human tonsil tissue lysate with EBI3 antibody at 2 µg/mL.



Western blot analysis of TIRP in PC-3 cell lysate with TIRP antibody at 1 µg/mL.

### **Slitrk1 Antibody - Background**

**Slitrk1 Antibody:** SLIT and NTRK-like family 1 (Slitrk1) is a member a protein family consisting of six homologous transmembrane proteins (Slitrk1-6) that share two conserved leucine-rich repeat domains in the extracellular domain and have significant homology to Slit, a secreted axonal growth-controlling protein. These proteins are also homologous to trk neurotrophin receptors in their intracellular domains. Expression of Slitrk proteins is highly restricted to neural and brain tumor tissues, but varies within the family. For example, Slitrk1 is expressed primarily in mature neurons. Overexpression of Slitrk1 in transfected neuronal cells induced unipolar neurites, while expression of the other Slitrk proteins inhibited neurite outgrowth, suggesting that these proteins are involved in the control of neurite outgrowth. While Slitrk1 variants have been suggested associated with Tourette's Syndrome, it is thought to play only a minor role if at all.

### **Slitrk1 Antibody - References**

Aruga J and Mikoshiba K. Identification and characterization of Slitrk, a novel transmembrane protein family controlling neurite outgrowth. *Mol. Cell Neurosci.*2003; 24:117-29.  
Aruga J, Yokota N, and Mikoshiba K. Human SLITRK family genes: genomic organization and expression profiling in normal and brain tumor tissue. *Gene*2003; 315:87-94.  
Abelson JF, Kwan KY, O'Roak BJ, et al. Sequence variants in SLITRK1 are associated with Tourette's syndrome. *Science*2005; 310:317-20.  
Fabbrini G, Pasquini M, Aurilia C, et al. A large Italian family with Gilles de la Tourette syndrome: clinical study and analysis of the SLITRK1 gene. *Mov. Disord.*2007; 22:2229-34.