

Slitrk2 Antibody Catalog # ASC10639

# Specification

# Slitrk2 Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Application Notes WB, IHC-P, IF, E <u>O9H156</u> <u>O9H156</u>, <u>46397026</u> Human, Mouse, Rat Rabbit Polyclonal IgG Slitrk2 antibody can be used for detection of Slitrk2 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.

# Slitrk2 Antibody - Additional Information

Gene ID 84631 Target/Specificity SLITRK2; This antibody is predicted to have no cross-reactivity to other Slitrk proteins.

#### **Reconstitution & Storage**

Slitrk2 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

Slitrk2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## Slitrk2 Antibody - Protein Information

Name SLITRK2

Synonyms CXorf2, KIAA1854, SLITL1

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>, PubMed:<a href="http://www.uniprot.org/citations/35840571" target="\_blank">35840571</a>). Suppresses neurite outgrowth (By similarity). Involved in the negative regulation of NTRK2 (PubMed:<a href="http://www.uniprot.org/citations/35840571" target="\_blank">35840571</a>). Suppresses neurite outgrowth (By similarity). Involved in the negative regulation of NTRK2 (PubMed:<a href="http://www.uniprot.org/citations/35840571" target="\_blank">35840571</a>).

**Cellular Location** 



Membrane; Single-pass type I membrane protein. Cell membrane. Cell projection, dendrite

#### **Tissue Location**

Expressed predominantly in the cerebral cortex of the brain but also at low levels in the spinal cord and medulla. Also expressed in some astrocytic brain tumors such as astrocytomas, oligodendrogliomas, glioblastomas, gangliogliomas and primitive neuroectodermal tumors.

## Slitrk2 Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

## Slitrk2 Antibody - Images



Western blot analysis of Slitrk2 in mouse brain tissue lysate with Slitrk2 antibody at (A) 1 and (B) 2  $\mu$ g/mL.



Immunohistochemistry of Slitrk2 in human brain tissue with Slitrk2 antibody at 2.5 µg/mL.





Immunofluorescence of slitrk2 in human brain tissue with slitrk2 antibody at 20 µg/mL.

# Slitrk2 Antibody - Background

Slitrk2 Antibody: SLIT and NTRK-like family 2 (Slitrk2) 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, Slitrk2 is expressed primarily in neurons in the ventricular layer of the brain. Like every other Slitrk protein except Slitrk1, overexpression of Slitrk2 inhibited neurite outgrowth in cultured neurons. Deletion analysis indicated that the functional difference between Slitrk2 and Slitrk1 is within their intracellular domains. At least two isoforms of this protein are known to exist.

## Slitrk2 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. Gene2003; 315:87-94.