

Slitrk1 Polyclonal Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP58393**Specification****Slitrk1 Polyclonal Antibody - Product Information**

Application	IHC-P, IHC-F, IF, ICC, E
Primary Accession	Q96PX8
Reactivity	Rat, Pig, Dog, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	76 KDa
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human Slitrk1
Epitope Specificity	21-120/696
Isotype	IgG
Purity	
affinity purified by Protein A	
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Membrane; Single-pass type I membrane protein (Potential).
SIMILARITY	Belongs to the SLITRK family. Contains 12 LRR (leucine-rich) repeats.Contains 2 LRRCT domains.Contains 2 LRRNT domains.
DISEASE	Defects in SLITRK1 may be a cause of Gilles de la Tourette syndrome (GTS) [MIM:137580]. GTS is a neurologic disorder manifested particularly by motor and vocal tics and associated with behavioral abnormalities.Defects in SLITRK1 may be a cause of trichotillomania (TTM) [MIM:613229]. It is a neuropsychiatric disorder characterized by chronic, repetitive, or compulsive hair pulling resulting in noticeable hair loss. Affected individuals may develop physical complications and often have overlapping psychologic disorders, such as Gilles de la Tourette syndrome or obsessive-compulsive disorder.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Background Descriptions

Slitrk1 is a member of 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 Polyclonal Antibody - Additional Information

Gene ID 114798

Other Names

SLIT and NTRK-like protein 1, Leucine-rich repeat-containing protein 12, SLITRK1, KIAA1910, LRRC12

Target/Specificity

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.

Dilution

IHC-P~N/A
IHC-F~N/A
IF~1:50~200
ICC~N/A
E~N/A

Storage

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Slitrk1 Polyclonal Antibody - Protein Information

Name SLITRK1

Synonyms KIAA1910, LRRC12

Function

It is involved in synaptogenesis and promotes excitatory synapse differentiation (PubMed:27273464, PubMed:27812321). Enhances neuronal dendrite outgrowth (PubMed:16224024, PubMed:19640509).

Cellular Location

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

Tissue Location

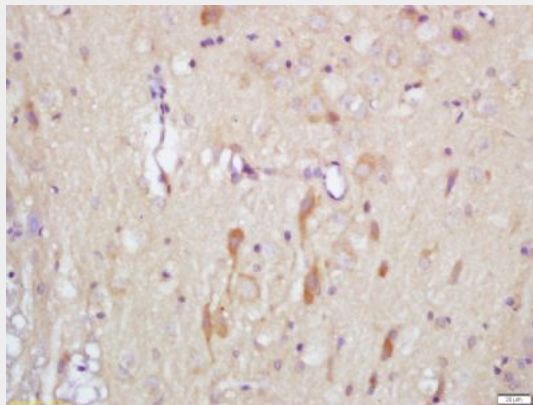
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Slitrk1 Polyclonal Antibody - Protocols

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 Polyclonal Antibody - Images



Tissue/cell: rat brain tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

Incubation: Anti-Slitrk1 Polyclonal Antibody, Unconjugated(bs-6192R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining