

Slitrk1 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP58393

Product Information

Application	IHC-P, IHC-F, IF, ICC, E
Primary Accession	Q96PX8
Reactivity	Rat, Pig, Dog, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	77735
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.

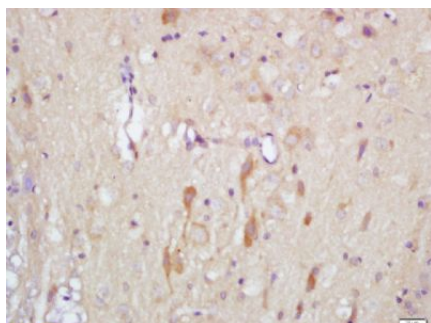
Additional Information

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=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce
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.

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	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

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(AP58393) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.