10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

SLITRK2 Rabbit pAb

SLITRK2 Rabbit pAb
Catalog # AP54684

Product Information

Application	WB, IHC-P, IHC-F, IF, E
Primary Accession	Q9H156
Predicted	Human, Mouse, Rat, Dog, Pig, Horse, Rabbit, Sheep, Guinea Pig
Host	Rabbit
Clonality	Polyclonal
Calculated MW	95404
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human SLITRK2
Epitope Specificity	311-410/845
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
SIMILARITY	Belongs to the SLITRK family. Contains 12 LRR (leucine-rich) repeats. Contains 2 LRRCT domains. Contains 1 LRRNT domain.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	SLITRK family proteins are integral membrane proteins that have a C-terminal domain that is partially similar to TRK neurotrophin receptor proteins and two leucine-rich repeat (LRR) domains that are similar to those of SLIT proteins. SLITRK2 (SLIT and NTRK-like protein 2) is a 845 amino acid single-pass type I membrane protein that contains 14 LRR (leucine-rich) repeats and is expressed in neural tissues, with highest levels found in adult cerebral cortex. Overexpression of SLITRK2 leads to inhibition of unipolar neurites in cultured cells, suggesting that it suppresses neurite outgrowth. Inhibitory activity of SLITRK2 is localized to its C-terminal intracellular domain and without this region the protein induces neurite outgrowth. Variants in the gene encoding SLITRK2 may contribute to the development of bipolar disorder, autism spectrum disorder and schizophrenia. There are two isoforms of SLITRK2 that are produced as a result of alternative splicing events.

Additional Information

Gene ID	84631
Other Names	SLIT and NTRK-like protein 2, SLITRK2, CXorf2, KIAA1854, SLITL1
Target/Specificity	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.

Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500,ELISA=1:5000-10000
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	SLITRK2
Synonyms	CXorf2, KIAA1854, SLITL1
Function	It is involved in synaptogenesis and promotes excitatory synapse differentiation (PubMed:27273464, PubMed:27812321, PubMed:35840571). Suppresses neurite outgrowth (By similarity). Involved in the negative regulation of NTRK2 (PubMed:35840571).
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.

Background

SLITRK family proteins are integral membrane proteins that have a C-terminal domain that is partially similar to TRK neurotrophin receptor proteins and two leucine-rich repeat (LRR) domains that are similar to those of SLIT proteins. SLITRK2 (SLIT and NTRK-like protein 2) is a 845 amino acid single-pass type I membrane protein that contains 14 LRR (leucine-rich) repeats and is expressed in neural tissues, with highest levels found in adult cerebral cortex. Overexpression of SLITRK2 leads to inhibition of unipolar neurites in cultured cells, suggesting that it suppresses neurite outgrowth. Inhibitory activity of SLITRK2 is localized to its C-terminal intracellular domain and without this region the protein induces neurite outgrowth. Variants in the gene encoding SLITRK2 may contribute to the development of bipolar disorder, autism spectrum disorder and schizophrenia. There are two isoforms of SLITRK2 that are produced as a result of alternative splicing events.