

LRRTM4 Antibody
Catalog # ASC11277**Specification****LRRTM4 Antibody - Product Information**

Application	WB, IHC-P, IF, E
Primary Accession	Q86VH4
Other Accession	NP_001128217 , 156139147
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Application Notes	LRRTM4 antibody can be used for detection of LRRTM4 by Western blot at 1 µg/mL. Antibody can also be used for immunohistochemistry starting at 2.5 µg/mL. For immunofluorescence start at 20 µg/mL.

LRRTM4 Antibody - Additional Information**Gene ID** 80059**Target/Specificity**

LRRTM4; At least two isoforms of LRRTM4 are known to exist; this antibody will both isoforms. LRRTM4 antibody is predicted to not cross-react with other LRRTM family members.

Reconstitution & Storage

LRRTM4 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

LRRTM4 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

LRRTM4 Antibody - Protein Information**Name** LRRTM4**Function**

May play a role in the development and maintenance of the vertebrate nervous system. Exhibits strong synaptogenic activity, restricted to excitatory presynaptic differentiation (By similarity).

Cellular Location

Cell membrane; Single-pass type I membrane protein. Postsynaptic cell membrane; Single-pass type I membrane protein

Tissue Location

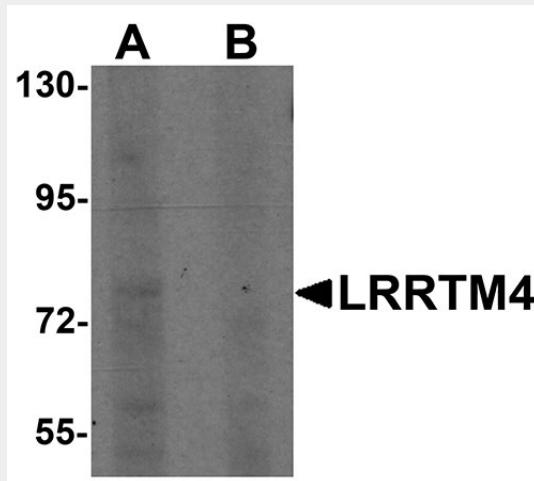
Expressed in neuronal tissues.

LRRTM4 Antibody - Protocols

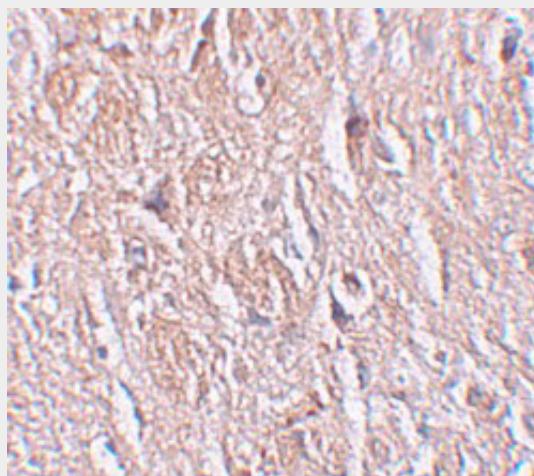
Provided below are standard protocols that you may find useful for product applications.

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

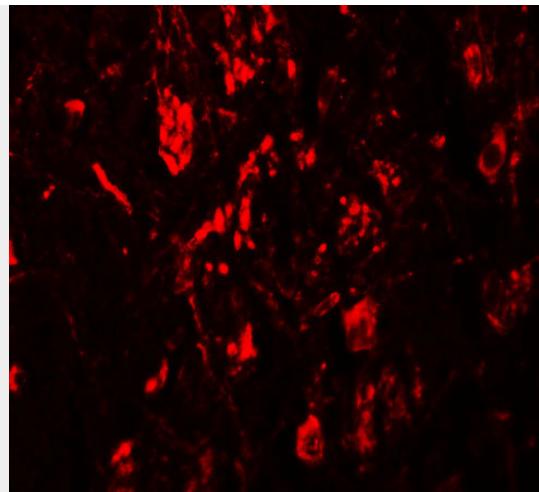
LRRTM4 Antibody - Images



Western blot analysis of LRRTM4 in HeLa cell lysate with LRRTM4 antibody at 1 μ g/mL in (A) the absence and (B) the presence of blocking peptide.



Immunohistochemistry of LRRTM4 in human brain tissue with LRRTM4 antibody at 2.5 μ g/mL.



Immunofluorescence of LRRTM4 in human brain tissue with LRRTM4 antibody at 20 µg/mL.

LRRTM4 Antibody - Background

LRRTM4 Antibody: The Leucine-rich repeat transmembrane neuronal proteins (LRRTMs) are differentially expressed in the nervous system and were recently found to instruct presynaptic and mediate postsynaptic glutamatergic differentiation, with LRRTM1 and LRRTM2 most potent at inducing presynaptic differentiation. Little is known about the function of LRRTM4; in mouse, it is expressed in the limb mesenchyme, neural tube, caudal mesoderm and in three distinct regions of the head. Later expression occurs in a subset of the developing sclerotome. Its similarity to other LRRTM family members suggests that LRRTM4 may also play a role in the development and maintenance of the vertebrate nervous system.

LRRTM4 Antibody - References

Lauren J, Airaksinen MS, Saarma M, et al. A novel gene family encoding leucine-rich repeat transmembrane protein differentially expressed in the nervous system. *Genomics* 2003; 81:411-21.

Linhoff MW, Lauren J, Cassidy RM, et al. An unbiased expression screen for synaptogenic proteins identifies the LRRTM protein family as synaptic organizers. *Neuron* 2009; 61:734-49.

Siddiqui TJ, Pancaroglu R, Kang Y, et al. LRRTMs and neuroligins bind neurexins with a differential code to cooperate in glutamate synapse development. *J. Neurosci.* 2010; 30:7495-506.

Haines BP and Rigby PW. Developmentally regulated expression of the LRRTM gene family during mid-gestation mouse embryogenesis. *Gene Expr. Patterns* 2007; 7:23-9.