

LPPR4 Antibody (C-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP4973b

Specification

LPPR4 Antibody (C-term) - Product Information

Application	FC, IHC-P, WB,E
Primary Accession	Q7Z2D5
Other Accession	Q7TME0 , NP_055654
Reactivity	Human
Predicted	Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	82983
Antigen Region	666-695

LPPR4 Antibody (C-term) - Additional Information

Gene ID 9890

Other Names

Lipid phosphate phosphatase-related protein type 4, Brain-specific phosphatidic acid phosphatase-like protein 1, Plasticity-related gene 1 protein, PRG-1, LPPR4, KIAA0455, PRG1

Target/Specificity

This LPPR4 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 666-695 amino acids from the C-terminal region of human LPPR4.

Dilution

FC~~1:10~50

IHC-P~~1:50~100

WB~~1:1000

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

LPPR4 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

LPPR4 Antibody (C-term) - Protein Information

Name PLPPR4 ([HGNC:23496](#))

Function Postsynaptic density membrane protein that indirectly regulates glutamatergic synaptic transmission through lysophosphatidic acid (LPA)-mediated signaling pathways. Binds lysophosphatidic acid (LPA) and mediates its internalization into cells. Could act as receptor or a transporter of this lipid at the post-synaptic membrane (By similarity). Modulates lysophosphatidic acid (LPA) activity in neuron axonal outgrowth during development by attenuating phospholipid-induced axon collapse (By similarity).

Cellular Location

Postsynaptic density membrane; Multi-pass membrane protein

Tissue Location

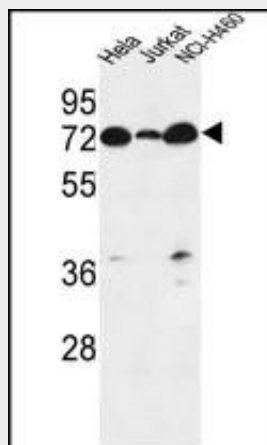
Expressed by glutamatergic neurons (at protein level).

LPPR4 Antibody (C-term) - Protocols

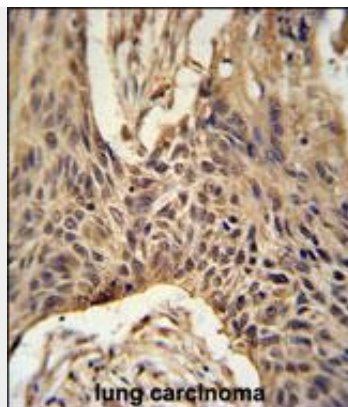
Provided below are standard protocols that you may find useful for product applications.

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

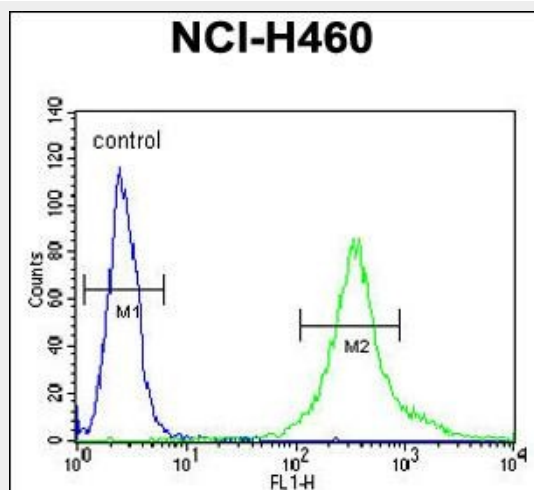
LPPR4 Antibody (C-term) - Images



LPPR4 Antibody (C-term) (Cat. #AP4973b) western blot analysis in HeLa, Jurkat, NCI-H460 cell line lysates (35ug/lane). This demonstrates the LPPR4 antibody detected the LPPR4 protein (arrow).



LPPR4 Antibody (C-term) (Cat. #AP4973b) immunohistochemistry analysis in formalin fixed and paraffin embedded human lung carcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the LPPR4 Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.



LPPR4 Antibody (C-term) (Cat. #AP4973b) flow cytometric analysis of NCI-H460 cells (right histogram) compared to a negative control cell (left histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

LPPR4 Antibody (C-term) - Background

LPPR4 belongs to the lipid phosphate phosphatase (LPP) family. LPPs catalyze the dephosphorylation of a number of bioactive lipid mediators that regulate a variety of cell functions. This protein is specifically expressed in neurons. It is located in the membranes of outgrowing axons and has been shown to be important for axonal outgrowth during development and regenerative sprouting.

LPPR4 Antibody (C-term) - References

- Trimbuch, T., et al. Cell 138(6):1222-1235(2009)
- Vasan, R.S., et al. JAMA 302(2):168-178(2009)
- Brauer, A.U., et al. Nat. Neurosci. 6(6):572-578(2003)