

## LPHN3 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP17661A

#### **Specification**

## LPHN3 Antibody (N-term) - Product Information

Application WB,E
Primary Accession Q9HAR2

Other Accession <u>Q9Z173</u>, <u>Q80TS3</u>, <u>Q97827</u>, <u>NP 056051.2</u>

Reactivity
Predicted
Bovine, Rat
Host
Clonality
Isotype
Calculated MW
Antigen Region
Human, Mouse
Bovine, Rat
Rabbit
Rabbit
Polyclonal
Rabbit IgG
161812
371-397

# LPHN3 Antibody (N-term) - Additional Information

#### **Gene ID 23284**

#### **Other Names**

Latrophilin-3, Calcium-independent alpha-latrotoxin receptor 3, CIRL-3, Lectomedin-3, LPHN3, KIAA0768, LEC3

## Target/Specificity

This LPHN3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 371-397 amino acids from the N-terminal region of human LPHN3.

#### **Dilution**

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**

LPHN3 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

#### LPHN3 Antibody (N-term) - Protein Information

Name ADGRL3 {ECO:0000303|PubMed:35418682, ECO:0000312|HGNC:HGNC:20974}



**Function** Orphan adhesion G-protein coupled receptor (aGPCR), which mediates synapse specificity (PubMed:35418682). Ligand binding causes a conformation change that triggers signaling via guanine nucleotide- binding proteins (G proteins) and modulates the activity of downstream effectors (PubMed:35418682). ADGRL3 is coupled with different classes of G alpha proteins, such as G(12)/G(13), G(s), G(i) or G(q), depending on the context (PubMed:35418682). Coupling to G(12)/G(13) G proteins, which mediates the activation Rho small GTPases is the most efficient (PubMed:35418682). Following G-protein coupled receptor activation, associates with cell adhesion molecules that are expressed at the surface of adjacent cells to direct synapse specificity (PubMed:26235030). Specifically mediates the establishment of Schaffer- collateral synapses formed by CA3-region axons on CA1-region pyramidal neurons in the hippocampus (By similarity). Localizes to postsynaptic spines in excitatory synapses in the S.oriens and S.radiatum and interacts with presynaptic cell adhesion molecules FLRT3 and TENM2, promoting synapse formation (By similarity). Plays a role in the development of glutamatergic synapses in the cortex (By similarity). Important in determining the connectivity rates between the principal neurons in the cortex (By similarity).

#### **Cellular Location**

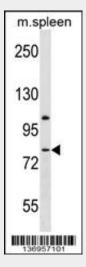
Cell membrane; Multi-pass membrane protein. Postsynaptic cell membrane {ECO:0000250|UniProtKB:Q80TS3}; Multi-pass membrane protein. Cell projection, axon {ECO:0000250|UniProtKB:Q80TS3}. Cell junction {ECO:0000250|UniProtKB:Q80TS3}

#### LPHN3 Antibody (N-term) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

#### LPHN3 Antibody (N-term) - Images



LPHN3 Antibody (N-term) (Cat. #AP17661a) western blot analysis in mouse spleen tissue lysates (35ug/lane). This demonstrates the LPHN3 antibody detected the LPHN3 protein (arrow).



# LPHN3 Antibody (N-term) - Background

This gene encodes a member of the latrophilin subfamily of G-protein coupled receptors (GPCR). Latrophilins may function in both cell adhesion and signal transduction. In experiments with non-human species, endogenous proteolytic cleavage within a cysteine-rich GPS (G-protein-coupled-receptor proteolysis site) domain resulted in two subunits (a large extracellular N-terminal cell adhesion subunit and a subunit with substantial similarity to the secretin/calcitonin family of GPCRs) being non-covalently bound at the cell membrane.

# **LPHN3 Antibody (N-term) - References**

Arcos-Burgos, M., et al. Mol. Psychiatry 15(11):1053-1066(2010) Shimada, M., et al. Hum. Genet. 128(4):433-441(2010) Kasperaviciute, D., et al. Brain 133 (PT 7), 2136-2147 (2010): Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010): Zemunik, T., et al. Croat. Med. J. 50(1):23-33(2009)