Datasheet for ABIN7581821

anti-LPHN3 antibody (AA 572-586)

Go to Product page

Overview

Quantity:	50 µL
Target:	LPHN3
Binding Specificity:	AA 572-586
Reactivity:	Mouse
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This LPHN3 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC)

Product Details

Purpose:	A Rabbit Polyclonal Antibody to Latrophilin-3
Immunogen:	(C)REIMWFKTRQGQVAK, corresponding to amino acid residues 572 - 586 of mouse Latrophilin-3
Sequence:	(C)REIMWFKTRQ GQVAK
Isotype:	IgG
Predicted Reactivity:	Rat - identical,Human- 14,15 identical
Characteristics:	Anti-Latrophilin-3 (extracellular) Antibody (ABIN7581821) is a highly specific antibody directed against an extracellular epitope of the mouse protein. The antibody can be used in western blot and immunohistochemistry applications. It has been designed to recognize Latrophilin-3 from mouse, rat and human samples.

Product Details

Purification:	Affinity purified on immobilized antigen.

Target Details

Target:	LPHN3
Alternative Name:	ADGRL3 (LPHN3 Products)
Background:	Adhesion G Protein-Coupled Receptor L3, ADGRL3, Calcium-Independent Alpha-Latrotoxin Receptor 3, LPHN3, Lectomedin-3,Latrophilin-3 (LPHN3), also known as ADGRL3, is a member of the adhesion G-protein-coupled receptor (aGPCR) family. This family is characterized by the presence of a GPCR autoproteolysis-inducing (GAIN) domain that facilitates receptor cleavage and activation, along with seven transmembrane domains1,3. LPHN3 is primarily localized to the cell membrane and is prominently expressed in neurons, with high levels observed in brain regions such as the hippocampus and prefrontal cortex1,5. LPHN3 plays critical roles in neuronal development and synapse formation. It mediates its effects through dual mechanisms: coupling with intracellular G-proteins, particularly Gαs and Gα12/13, and recruiting phase-separated postsynaptic protein scaffolds. Activation of LPHN3 is triggered by interactions with its ligands, such as teneurins and FLRTs, which enhance synaptic clustering by promoting scaffold protein condensates. Alternative splicing of Lphn3, studied in mouse models, modulates these pathways, influencing synaptic connectivity and neuronal activity3,4. Biologically, LPHN3 is involved in attention regulation and motor control, with its dysregulation linked to attention deficit hyperactivity disorder (ADHD). Genetic variants in LPHN3 are associated with altered dopaminergic signaling and increased susceptibility to ADHD, as demonstrated in human studies1,2. Furthermore, LPHN3 dysfunction has been implicated in substance use disorders and learning deficits, underscoring its importance in neuropsychiatric and cognitive processes2,5.
Gene ID:	319387
UniProt:	Q80TS3

Application Details

Application Notes:	Antigen preadsorption control: 1 µg peptide per 1 µg antibody
Restrictions:	For Research Use only

Handling

Format:	Lyophilized

Handling

Reconstitution:	0.2 mL double distilled water (DDW).
Concentration:	1 mg/mL
Buffer:	PBS pH 7.4
Storage:	4 °C,-20 °C
Storage Comment:	Storage before reconstitution: The antibody ships as a lyophilized powder at room temperature. Upon arrival, it should be stored at -20°C. Storage after reconstitution: The reconstituted solution can be stored at 4°C for up to 1 week. For longer periods, small aliquots should be stored at -20°C. Avoid multiple freezing and thawing. Centrifuge all antibody preparations before use (10000 x g 5 min).