

Datasheet for ABIN7043314
anti-LPAR3 antibody (Extracellular)



[Go to Product page](#)

1 Image

Overview

Quantity:	25 µL
Target:	LPAR3
Binding Specificity:	AA 16-29, Extracellular
Reactivity:	Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This LPAR3 antibody is un-conjugated
Application:	Western Blotting (WB)

Product Details

Purpose:	A Rabbit Polyclonal Antibody to LPA Receptor 3 (EDG7)
Immunogen:	Immunogen: Synthetic peptide Immunogen Sequence: (C)RSNTDTADEWTGTK, corresponding to amino acid residues 16-29 of rat LPA3 receptor
Isotype:	IgG
Specificity:	Extracellular, N-terminus
Cross-Reactivity:	Human, Mouse, Rat
Predicted Reactivity:	Mouse - identical, human - 12,14 amino acid residues identical
Characteristics:	Anti-LPAR3 (EDG7) (extracellular) Antibody (ABIN7043314, ABIN7044570 and ABIN7044571) is a highly specific antibody directed against an epitope to the rat LPA3 receptor. The antibody

Product Details

can be used in western blot analysis. It recognizes an extracellular epitope and is thus ideal for detecting the receptor in living cells. It has been designed to recognize LPA3 receptor from mouse, rat, and human samples.

Purification: Affinity purified on immobilized antigen.

Target Details

Target: LPAR3

Alternative Name: LPAR3 ([LPAR3 Products](#))

Background: Lysophosphatidic acid receptor 3, LPA receptor 3, LPA-3, snGPCR32, Lysophosphatidic acid (LPA) is a bioactive lipid molecule with a phosphate, a glycerol, and a fatty acid in its structure. The cellular effects of LPA include proliferation, migration, cytokine secretion, and morphological change. These pleiotropic actions allow LPA to participate in a wide variety of biological processes, such as brain development, oncogenesis, wound healing and cancer progression¹. To date, at least 6 subtypes of LPA receptors have been identified. The LPA1-3 receptors are members of the endothelial cell differentiation gene (Edg) family². All six receptors are type I, rhodopsin-like G-protein coupled receptors (GPCRs) that differ in their tissue distribution and downstream signaling pathways³. GPCRs share a similar topology, with seven transmembrane helices (TMHs) connected by three extracellular loops (ECLs), and three intracellular loops (ICLs), the N-terminus is on the extracellular side of the membrane, and the C-terminus is on the cytoplasmic side⁴. Expression of LPA3 receptor has been observed in human heart, testis, prostate, pancreas, lung, ovary, and brain⁵ and is most abundant in mouse testis, kidney, lung, small intestine, heart, stomach, spleen, brain, and thymus⁶. LPA3 receptor null mice are viable and grossly normal, but female nulls show a striking phenotype in the reproductive system⁷. However, despite the fact that LPA3 is expressed in the frontal cortex, hippocampus, and amygdala, no phenotypes related to LPA3 loss in the nervous system have been reported to date⁵.

Alternative names: LPAR3 (EDG7), Lysophosphatidic acid receptor 3, LPA receptor 3, LPA-3, snGPCR32

Gene ID: 66025

NCBI Accession: [NM_012152](#)

UniProt: [Q8K5E0](#)

Pathways: [Regulation of Cell Size](#)

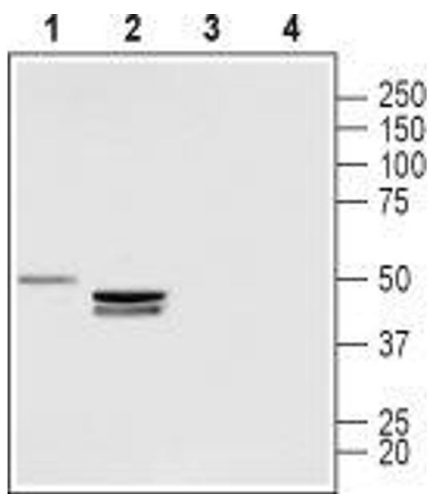
Application Details

Application Notes:	Antigen preadsorption control: 1 µg peptide per 1 µg antibody Application Dilutions Immunohistochemistry paraffin embedded sections ihc: N/A Application Dilutions Western blot wb: 1:200
Comment:	Negative Control: (ABIN7235904) Blocking Peptide: (ABIN7235904)
Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	Reconstitute with double distilled water (DDW) to a concentration of 1.0 mg/mL.
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).

Images



Western Blotting

Image 1. Western blot analysis of rat testis (lanes 1 and 3) and human OVCAR-3 (lanes 2 and 4): - 1,2. Anti-LPAR3 (EDG7) (extracellular) Antibody (ABIN7043314, ABIN7044570 and ABIN7044571), (1:200).3,4. Anti-LPAR3 (EDG7) (extracellular) Antibody, preincubated with LPAR3/EDG7 (extracellular) Blocking Peptide (#BLP-LR033).