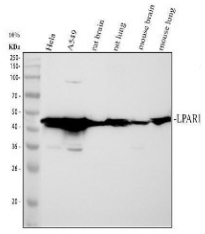
LPAR1 Antibody / EDG2 Antibody (FY13474)

Catalog No.	Formulation	Size
FY13474	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Species Reactivity	Human, Mouse, Rat
Format	Lyophilized
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	Q92633
Applications	Western blot: 0.5-1ug/ml ELISA: 0.1-0.5ug/ml
Limitations	This LPAR1 Antibody / EDG2 Antibody is available for research use only.



LPAR1 Antibody Human, Rat and Mouse WB. Western blot analysis of LPAR1 Antibody using lysates from 1) human HeLa cells, 2) human A549 cells, 3) rat brain tissue, 4) rat lung tissue, 5) mouse brain tissue, and 6) mouse lung tissue. Samples (30 ug/lane) were separated on a 10% SDS-PAGE gel under reducing conditions, transferred to a nitrocellulose membrane, and detected with LPAR1 Antibody at 0.25 ug/mL followed by an HRP-conjugated secondary antibody and ECL detection. A specific band is observed at approximately 41 kDa in all samples, consistent with the predicted molecular weight of LPAR1/EDG2. These results demonstrate that LPAR1 Antibody, an EDG2 Antibody, specifically detects endogenous receptor expression across human, rat, and mouse samples.

Description

LPAR1 Antibody recognizes lysophosphatidic acid receptor 1 (LPAR1), the first identified member of the lysophosphatidic acid receptor family and a G protein-coupled receptor historically known as EDG2. LPAR1 mediates cellular responses to the bioactive phospholipid lysophosphatidic acid, regulating diverse signaling pathways that influence cell proliferation, migration, survival, differentiation, and cytoskeletal remodeling. The receptor is broadly expressed in the nervous system, lung, heart, kidney, fibroblasts, endothelial cells, and numerous other tissues, reflecting its central role in normal

physiology. Because of its wide distribution and involvement in multiple signaling networks, LPAR1 Antibody is widely used to investigate GPCR biology, lipid signaling, and tissue-specific receptor expression.

Upon binding lysophosphatidic acid, LPAR1 activates multiple heterotrimeric G protein pathways that regulate Rho, phospholipase C, phosphoinositide 3-kinase, mitogen-activated protein kinase, and other downstream signaling cascades. Through these pathways, LPAR1 controls cell shape, adhesion, migration, neurite retraction, survival, and extracellular matrix remodeling. The receptor is particularly important during embryonic development, where it contributes to nervous system formation, vascular development, pulmonary maturation, and skeletal development. Beyond development, LPAR1 regulates wound healing, immune responses, fibrosis, and tissue repair. Consequently, LPAR1 Antibody has become an important reagent for studies of developmental biology, regenerative medicine, and lipid-mediated GPCR signaling.

Aberrant LPAR1 signaling has been implicated in numerous human diseases. Increased receptor activity has been associated with pulmonary fibrosis, liver fibrosis, kidney fibrosis, systemic sclerosis, chronic inflammatory disorders, neuropathic pain, and several forms of cancer, including breast, ovarian, prostate, and colorectal malignancies. LPAR1 signaling also contributes to tumor cell migration, invasion, angiogenesis, and interactions with the surrounding tumor microenvironment. These findings have established the receptor as both a therapeutic target and an important biomarker candidate. Researchers commonly employ LPAR1 Antibody in Western blotting, immunohistochemistry, immunofluorescence, flow cytometry, and related protein expression studies to evaluate receptor localization and signaling across normal and diseased tissues. Because LPAR1 is an integral membrane GPCR, validated antibodies are particularly valuable for obtaining reliable and reproducible results.

NSJ Bioreagents provides LPAR1 Antibody products that undergo validation for research applications to support consistent detection of this biologically important receptor. Whether investigating GPCR biology, lysophosphatidic acid signaling, embryonic development, fibrosis, cancer progression, or nervous system function, a high-quality EDG2 Antibody enables accurate characterization of receptor expression and localization. As research continues to uncover new roles for lysophosphatidic acid signaling in physiology and disease, LPAR1 Antibody remains an essential tool for studying receptor function and downstream signaling mechanisms.

Explore our GPCR Antibodies page to discover additional antibodies against G protein-coupled receptors involved in lipid signaling, chemokine responses, neurotransmission, sensory perception, and numerous other signaling pathways that complement LPAR1 Antibody research.

Application Notes

Optimal dilution of the LPAR1 Antibody / EDG2 Antibody should be determined by the researcher.

Immunogen

E. coli-derived recombinant human Lysophosphatidic acid receptor 1 protein (amino acids 307-361) was used as the immunogen for the LPAR1 Antibody.

Storage

After reconstitution, the LPAR1 Antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

Alternate Names

LPAR1 antibody, EDG2 antibody, Lysophosphatidic Acid Receptor 1 antibody, LPA1 antibody, Endothelial Differentiation Gene 2 antibody, Lysophosphatidic Acid Receptor antibody

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