

Anti-EDG1 S1PR1 Rabbit Monoclonal Antibody
Catalog # ABO13525**Specification**

Anti-EDG1 S1PR1 Rabbit Monoclonal Antibody - Product Information

Application	WB
Primary Accession	P21453
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Format	Liquid

Description

Anti-EDG1 S1PR1 Rabbit Monoclonal Antibody . Tested in WB application. This antibody reacts with Human, Mouse, Rat.

Anti-EDG1 S1PR1 Rabbit Monoclonal Antibody - Additional Information

Gene ID 1901

Other Names

Sphingosine 1-phosphate receptor 1, S1P receptor 1, S1P1, Endothelial differentiation G-protein coupled receptor 1, Sphingosine 1-phosphate receptor Edg-1, S1P receptor Edg-1, CD363, S1PR1, CHEDG1, EDG1

Calculated MW

42811 MW KDa

Application Details

WB 1:500-1:2000

Subcellular Localization

Cell membrane; Multi-pass membrane protein. Endosome. Membrane raft. Recruited to caveolin-enriched plasma membrane microdomains in response to oxidized 1-palmitoyl-2-arachidonoyl-sn-glycero-3-phosphocholine. Ligand binding leads to receptor internalization.

Tissue Specificity

Endothelial cells, and to a lesser extent, in vascular smooth muscle cells, fibroblasts, melanocytes, and cells of epithelioid origin.

Contents

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

Immunogen

A synthesized peptide derived from human EDG1

Purification

Affinity-chromatography

Storage

Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

Anti-EDG1 S1PR1 Rabbit Monoclonal Antibody - Protein Information

Name S1PR1

Synonyms CHEDG1, EDG1

Function

G-protein coupled receptor for the bioactive lysosphingolipid sphingosine 1-phosphate (S1P) that seems to be coupled to the G(i) subclass of heteromeric G proteins. Signaling leads to the activation of RAC1, SRC, PTK2/FAK1 and MAP kinases. Plays an important role in cell migration, probably via its role in the reorganization of the actin cytoskeleton and the formation of lamellipodia in response to stimuli that increase the activity of the sphingosine kinase SPHK1. Required for normal chemotaxis toward sphingosine 1-phosphate. Required for normal embryonic heart development and normal cardiac morphogenesis. Plays an important role in the regulation of sprouting angiogenesis and vascular maturation. Inhibits sprouting angiogenesis to prevent excessive sprouting during blood vessel development. Required for normal egress of mature T-cells from the thymus into the blood stream and into peripheral lymphoid organs. Plays a role in the migration of osteoclast precursor cells, the regulation of bone mineralization and bone homeostasis (By similarity). Plays a role in responses to oxidized 1-palmitoyl-2-arachidonoyl-sn-glycero-3- phosphocholine by pulmonary endothelial cells and in the protection against ventilator-induced lung injury.

Cellular Location

Cell membrane; Multi-pass membrane protein. Endosome. Membrane raft. Note=Recruited to caveolin-enriched plasma membrane microdomains in response to oxidized 1-palmitoyl-2-arachidonoyl-sn-glycero-3-phosphocholine. Ligand binding leads to receptor internalization

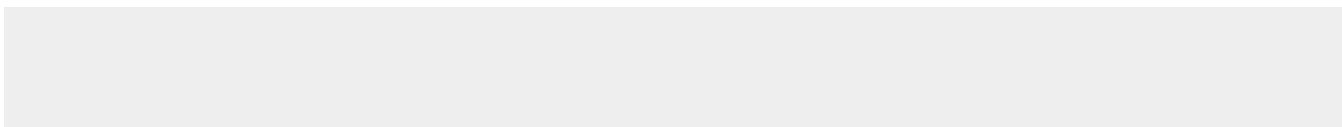
Tissue Location

Endothelial cells, and to a lesser extent, in vascular smooth muscle cells, fibroblasts, melanocytes, and cells of epithelioid origin

Anti-EDG1 S1PR1 Rabbit Monoclonal Antibody - 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](#)

Anti-EDG1 S1PR1 Rabbit Monoclonal Antibody - Images

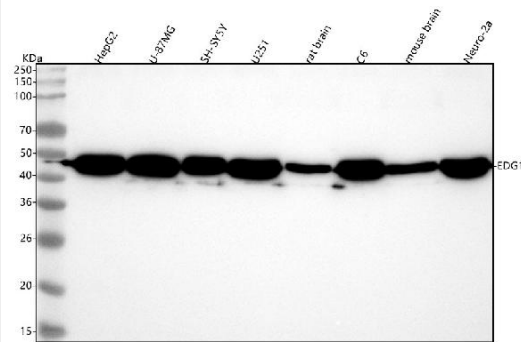


Figure 1. Western blot analysis of EDG1 using anti-EDG1 antibody (M01502).

Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human HepG2 whole cell lysates,

Lane 2: human U-87MG whole cell lysates,

Lane 3: human SH-SY5Y whole cell lysates,

Lane 4: human U251 whole cell lysates,

Lane 5: rat brain tissue lysates,

Lane 6: rat C6 whole cell lysates,

Lane 7: mouse brain tissue lysates,

Lane 8: mouse Neuro-2a whole cell lysates.

After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-EDG1 antigen affinity purified monoclonal antibody (Catalog # M01502) at 1:500 overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:500 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for EDG1 at approximately 43 kDa. The expected band size for EDG1 is at 43 kDa.