

EDG1 Antibody

Rabbit mAb Catalog # AP91160

Specification

EDG1 Antibody - Product Information

Application WB
Primary Accession P21453
Reactivity Rat

Clonality Monoclonal

Other Names

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;

Isotype Rabbit IgG
Host Rabbit
Calculated MW 42811 Da

EDG1 Antibody - Additional Information

Purification Affinity-chromatography

Immunogen A synthesized peptide derived from human

EDG1

Description Receptor for the lysosphingolipid

sphingosine 1-phosphate (S1P). S1P is a bioactive lysophospholipid that elicits diverse physiological effect on most types

of cells and tissues. This inducible

epithelial cell G-protein-coupled receptor may be involved in the processes that regulate the differentiation of endothelial

cells.

Storage Condition and Buffer Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide

and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid

freeze / thaw cycle.

EDG1 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

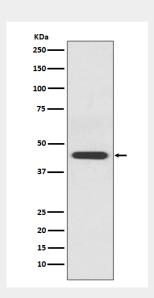
Endothelial cells, and to a lesser extent, in vascular smooth muscle cells, fibroblasts, melanocytes, and cells of epithelioid origin

EDG1 Antibody - Protocols

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

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

EDG1 Antibody - Images



Western blot analysis of EDG1 expression in Jurkat cell lysate.