

S1PR1 / EDG1 / S1P1 Antibody

Rabbit Polyclonal Antibody Catalog # ALS14503

Specification

S1PR1 / EDG1 / S1P1 Antibody - Product Information

Application WB
Primary Accession P21453

Reactivity Human, Mouse, Rat, Pig

Host Rabbit
Clonality Polyclonal
Calculated MW 43kDa KDa

S1PR1 / EDG1 / S1P1 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

Target/Specificity

The S1P1 antibody is directed against a cytoplasmic loop of this receptor.

Reconstitution & Storage

Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles.

Precautions

S1PR1 / EDG1 / S1P1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

S1PR1 / EDG1 / S1P1 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

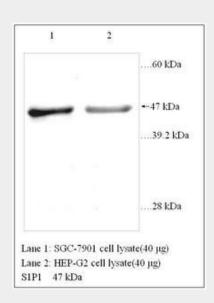
Volume 50 µl

S1PR1 / EDG1 / S1P1 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 Cytomety
- Cell Culture

S1PR1 / EDG1 / S1P1 Antibody - Images



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S1PR1 / EDG1 / S1P1 Antibody - Background





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Hla T., et al.J. Biol. Chem. 265:9308-9313(1990). An S., et al. FEBS Lett. 417:279-282(1997). Parrill A.L., et al.J. Biol. Chem. 275:39379-39384(2000). Ota T., et al. Nat. Genet. 36:40-45(2004). Halleck A., et al. Submitted (JUN-2004) to the EMBL/GenBank/DDBJ databases.