

EDG1 Antibody (N-term)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP6137a**Specification**

EDG1 Antibody (N-term) - Product Information

| | |
|-------------------|---------------------------|
| Application | WB,E |
| Primary Accession | P21453 |
| Other Accession | NP_001391 |
| Reactivity | Human, Mouse |
| Host | Rabbit |
| Clonality | Polyclonal |
| Isotype | Rabbit IgG |
| Calculated MW | 42811 |
| Antigen Region | 10-39 |

EDG1 Antibody (N-term) - 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

This EDG1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 10-39 amino acids from the N-terminal region of human EDG1.

Dilution

WB~~1:1000

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

EDG1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

EDG1 Antibody (N-term) - 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

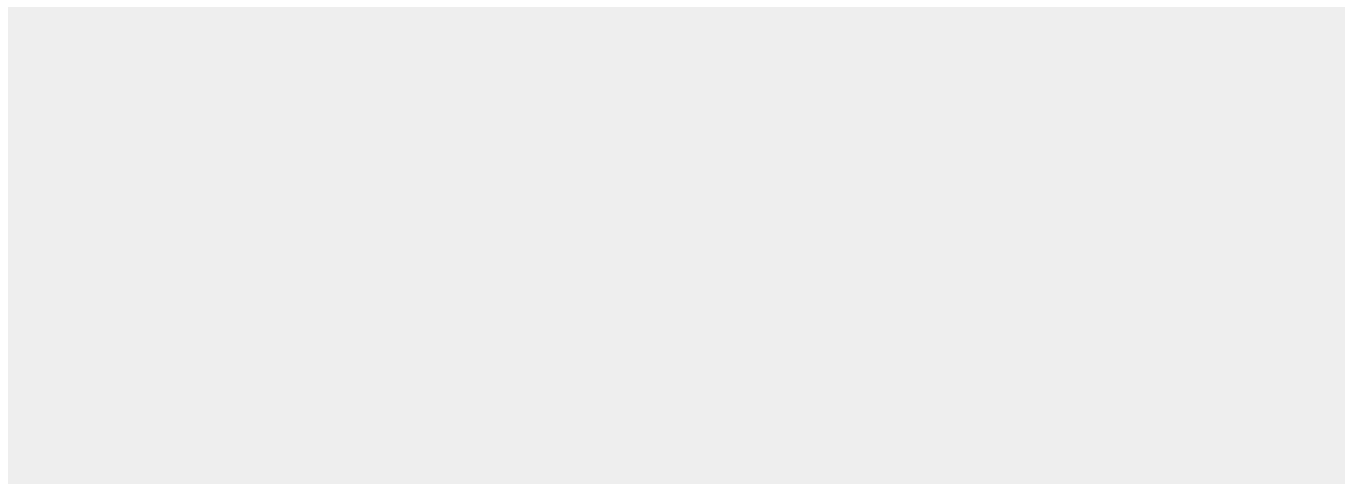
Tissue Location

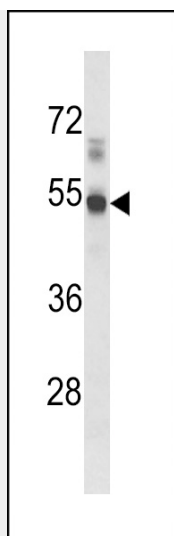
Endothelial cells, and to a lesser extent, in vascular smooth muscle cells, fibroblasts, melanocytes, and cells of epithelioid origin

EDG1 Antibody (N-term) - 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](#)

EDG1 Antibody (N-term) - Images



Western blot analysis of hEDG1-I25 (Cat. #AP6137a) in mouse lung tissue lysates (35ug/lane). EDG1 (arrow) was detected using the purified Pab.

EDG1 Antibody (N-term) - Background

EDG1 is structurally similar to G protein-coupled receptors and is highly expressed in endothelial cells. It binds the ligand sphingosine-1-phosphate with high affinity and high specificity, and suggested to be involved in the processes that regulate the differentiation of endothelial cells. Activation of this receptor induces cell-cell adhesion.

EDG1 Antibody (N-term) - References

Dorsam, G., et al., J. Immunol. 171(7):3500-3507 (2003).
zu Heringdorf, D.M., et al., Cell. Signal. 15(7):677-687 (2003).
Watterson, K.R., et al., J. Biol. Chem. 277(8):5767-5777 (2002).
Liu, Y., et al., J. Clin. Invest. 106(8):951-961 (2000).
Lee, M.J., et al., Cell 99(3):301-312 (1999).