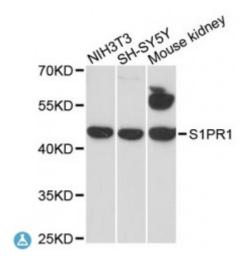


## **Anti-S1PR1 Antibody**



**Description** The protein encoded by this gene 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 cellcell adhesion. Alternative splicing results in multiple transcript variants.

Model STJ114801

**Host** Rabbit

**Reactivity** Human, Mouse

**Applications** WB

Immunogen Recombinant fusion protein containing a sequence corresponding to amino

acids 303-382 of human S1PR1 (NP\_001391.2).

**Gene ID** 1901

Gene Symbol S1PR1

**Dilution range** WB 1:500 - 1:2000

**Tissue Specificity** Endothelial cells, and to a lesser extent, in vascular smooth muscle cells,

fibroblasts, melanocytes, and cells of epithelioid origin

**Purification** Affinity purification

**Note** For Research Use Only (RUO).

**Protein Name** 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 CD antigen CD363

Molecular Weight 42.811 kDa

**Clonality** Polyclonal

**Conjugation** Unconjugated

**Isotype** IgG

**Formulation** PBS with 0.02% sodium azide, 50% glycerol, pH7.3.

**Storage Instruction** Store at -20C. Avoid freeze / thaw cycles.

Database Links HGNC:3165OMIM:601974Reactome:R-HSA-418594

Alternative 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 CD antigen CD363

**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,

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 Localization Cell membrane

Post-translational Modifications S1P-induced endothelial cell migration requires the PKB/AKT1-mediated phosphorylation of the third intracellular loop at the Thr-236 residue,

St John's Laboratory Ltd

**F** +44 (0)207 681 2580

**T** +44 (0)208 223 3081

W http://www.stjohnslabs.com/ E info@stjohnslabs.com