

EDG-1 Polyclonal Antibody

Catalog No: YT1459

Reactivity: Human; Mouse; Rat

Applications: WB;IF;ELISA

Target: EDG-1

Fields: >>FoxO signaling pathway;>>Sphingolipid signaling pathway;>>Neuroactive

ligand-receptor interaction

Gene Name: S1PR1

Protein Name: Sphingosine 1-phosphate receptor 1

P21453

O08530

Human Gene Id: 1901

Human Swiss Prot

No:

Mouse Gene Id: 13609

Mouse Swiss Prot

No:

Rat Gene Id: 29733

Rat Swiss Prot No: P48303

Immunogen: The antiserum was produced against synthesized peptide derived from human

S1P Receptor EDG1. AA range:206-255

Specificity: EDG-1 Polyclonal Antibody detects endogenous levels of EDG-1 protein.

Formulation : Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

Dilution: WB 1:500 - 1:2000. IF 1:200 - 1:1000. ELISA: 1:5000. Not yet tested in other

applications.



Purification: The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 50kD

Cell Pathway: Neuroactive ligand-receptor interaction;

Background: 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 cell-cell adhesion. Alternative splicing results in

multiple transcript variants. [provided by RefSeq, Mar 2016],

Function: function: 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. Seems to be coupled to the G(i) subclass of heteromeric G

proteins.,induction:By the tumor promoter phorbol 12-myristate 13-acetate (PME) in the presence of cycloheximide.,PTM:S1P-induced endothelial cell migration requires the PKB/AKT1-mediated phosphorylation of the third intracellular loop at the Thr-236 residue..similarity:Belongs to the G-protein coupled receptor 1

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

Subcellular Location:

Cell membrane ; Multi-pass membrane protein. Endosome. Membrane raft. Recruited to caveolin-enriched plasma membrane microdomains in response to

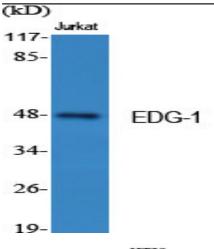
oxidized 1-palmitoyl-2-arachidonoyl-sn-glycero-3-phosphocholine. Ligand binding

leads to receptor internalization.

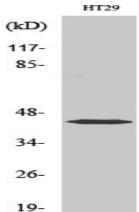
Expression: Endothelial cells, and to a lesser extent, in vascular smooth muscle cells,

fibroblasts, melanocytes, and cells of epithelioid origin.

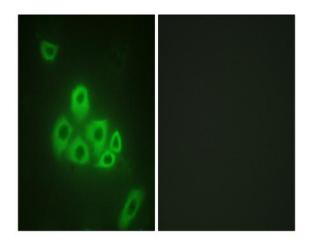
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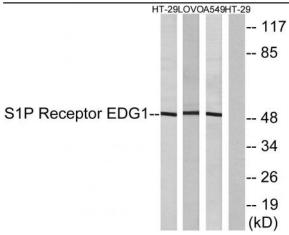
Western Blot analysis of various cells using EDG-1 Polyclonal Antibody



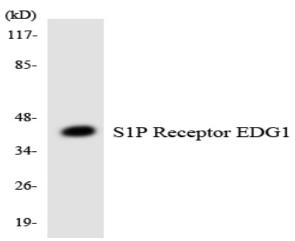
Western Blot analysis of A549 cells using EDG-1 Polyclonal Antibody



Immunofluorescence analysis of A549 cells, using S1P Receptor EDG1 Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from HT-29, LOVO, and A549 cells, using S1P Receptor EDG1 Antibody. The lane on the right is blocked with the synthesized peptide.



Western blot analysis of the lysates from HUVECcells using S1P Receptor EDG1 antibody.