

Anti-EDG1 S1PR1 Rabbit Monoclonal Antibody

Catalog # ABO13525

Product Information

Application	WB
Primary Accession	P21453
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Format	Liquid
Description	Anti-EDG1 S1PR1 Rabbit Monoclonal Antibody . Tested in WB application. This antibody reacts with Human, Mouse, Rat.

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
Calculated MW	42811
Application Details	WB 1:500-1:2000
Subcellular Localization	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.
Tissue Specificity	Endothelial cells, and to a lesser extent, in vascular smooth muscle cells, fibroblasts, melanocytes, and cells of epithelioid origin.
Source	Eukaryota
Contents	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
Clone Names	Clone: AABO-19
Immunogen	A synthesized peptide derived from human EDG1
Purification	Affinity-chromatography
Storage	Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

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

Images

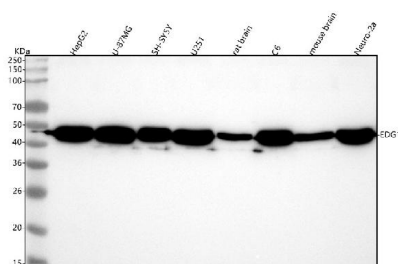


Figure 1. Western blot analysis of EDG1 using anti-EDG1 antibody (M01502).

Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human HepG2 whole cell lysates,
Lane 2: human U-87MG whole cell lysates,
Lane 3: human SH-SY5Y whole cell lysates,
Lane 4: human U251 whole cell lysates,
Lane 5: rat brain tissue lysates,
Lane 6: rat C6 whole cell lysates,
Lane 7: mouse brain tissue lysates,
Lane 8: mouse Neuro-2a whole cell lysates.

After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-EDG1 antigen affinity purified monoclonal antibody (Catalog # M01502) at 1:500 overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary

antibody at a dilution of 1:500 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for EDG1 at approximately 43 kDa. The expected band size for EDG1 is at 43 kDa.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.