

EDG8 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP57973

Product Information

Application IHC-P, IHC-F, IF, ICC, E

Primary Accession

Reactivity
Rat, Pig, Dog
Host
Rabbit
Clonality
Polyclonal
Calculated MW
41775
Physical State
Liquid

Immunogen KLH conjugated synthetic peptide derived from human EDG8

Epitope Specificity 1-100/398 **Isotype** IgG

Purity affinity purified by Protein A

Buffer 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

SUBCELLULAR LOCATION Cell membrane; Multi-pass membrane protein SIMILARITY Belongs to the G-protein coupled receptor 1 family.

Important Note This product as supplied is intended for research use only, not for use in

human, therapeutic or diagnostic applications.

Background Descriptions The EDG (endothelial differentiation gene) family of G protein coupled

receptors consists of eight family members that bind lysophospholipid (LPL) mediators, including sphingosine-1-phosphate (SPP) and lysophosphatidic acid (LPA). EDG-1, EDG-3, EDG-5 (also designated H218 and AGR16) and EDG-8 bind SPP with high affinity. EDG-6 is a low affinity receptor for SPP. LPA preferentially binds to EDG-2, EDG-4 and EDG-7. The EDG receptors couple to multiple G proteins to signal through Ras, MAP kinase, Rho, Phospholipase C or other tyrosine kinases, which lead to cell survival, growth, migration and differentiation. EDG-1 signals through Gi proteins to activate Akt and is expressed in glioma cells. EDG-2 is expressed in brain, especially in white matter tract regions, while EDG-3 is expressed in cardiovascular tissue and in cerebellum. EDG-4 is highly expressed on leukocytes and brain, and EDG-5 has wide tissue distribution, including cardiovascular tissue and in lung, signals

through Gi/o proteins, which activate growth related pathways.

Additional Information

Gene ID 53637

Other Names Sphingosine 1-phosphate receptor 5, S1P receptor 5, S1P5, Endothelial

differentiation G-protein-coupled receptor 8, Sphingosine 1-phosphate

receptor Edg-8, S1P receptor Edg-8, S1PR5, EDG8

Target/Specificity Widely expressed in the brain, most prominently in the corpus callosum,

which is predominantly white matter. Detected in spleen, peripheral blood leukocytes, placenta, lung, aorta and fetal spleen. Low-level signal detected in many tissue extracts. Overexpressed in leukemic large granular lymphocytes. Isoform 1 is predominantly expressed in peripheral tissues. Isoform 2 is expressed in brain, spleen and peripheral blood leukocytes.

Dilution IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-500,ELISA=1:5000-

10000

Storage Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When

reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody

is stable for at least two weeks at 2-4 °C.

Protein Information

Name S1PR5

Synonyms EDG8

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. Is coupled to both the G(i/0)alpha and G(12) subclass of heteromeric G-proteins (By similarity). May play a regulatory role in the transformation of radial glial cells into astrocytes and may affect

proliferative activity of these cells.

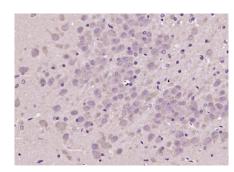
Cellular Location Cell membrane; Multi-pass membrane protein.

Tissue Location Widely expressed in the brain, most prominently in the corpus callosum,

which is predominantly white matter. Detected in spleen, peripheral blood leukocytes, placenta, lung, aorta and fetal spleen. Low-level signal detected in many tissue extracts Overexpressed in leukemic large granular lymphocytes. Isoform 1 is predominantly expressed in peripheral tissues. Isoform 2 is

expressed in brain, spleen and peripheral blood leukocytes

Images



Paraformaldehyde-fixed, paraffin embedded (rat brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (EDG8) Polyclonal Antibody, Unconjugated (AP57973) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.

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