

EDG8 Polyclonal Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP57973**Specification****EDG8 Polyclonal Antibody - Product Information**

Application	IHC-P, IHC-F, IF, ICC, E
Primary Accession	Q9H228
Reactivity	Rat, Pig, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	42 KDa
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 brain. EDG-6, which is expressed in lymphoid and hematopoietic tissues and in lung, signals through Gi/o proteins, which activate growth related pathways.

EDG8 Polyclonal Antibody - 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 ~ N/A
IHC-F ~ N/A
IF ~ 1:50 ~ 200
ICC ~ N/A
E ~ N/A

Format

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

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.

EDG8 Polyclonal Antibody - 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/o)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

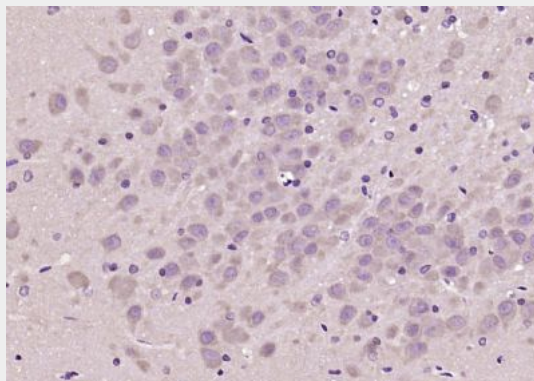
EDG8 Polyclonal Antibody - Protocols

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](#)

EDG8 Polyclonal Antibody - 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 (bs-21807R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.