

AP01311PU-N**Polyclonal Antibody to EDG5 / S1P2 - Aff - Purified**

Alternate names:	AGR16, EDG5, Endothelial differentiation G-protein coupled receptor 5, Gpcr13, H218, LPB2, S1P receptor 2, S1PR2, Sphingosine 1-phosphate receptor 2
Quantity:	0.1 mg
Concentration:	1.0 mg/ml
Background:	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. Expressed in lymphoid and hematopoietic tissues and in lung, EDG-6 signals through Gi/o proteins, which activate growth related pathways.
Uniprot ID:	Q95136
NCBI:	NP_004221.3
GeneID:	9294
Host:	Rabbit
Immunogen:	Synthetic peptide corresponding to amino acids 271-320 of Human EDG-5.
Format:	State: Liquid purified Ig fraction (> 95% pure by SDS-PAGE) Purification: Affinity Chromatography using epitope-specific immunogen Buffer System: Phosphate buffered saline (PBS), pH~7.2 Preservatives: 0.05% Sodium Azide
Applications:	Western blot: 1/500-1/1000. Immunofluorescence: 1/50-1/200. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Molecular Weight:	~39 kDa
Specificity:	This antibody detects endogenous levels of EDG-5 protein (region surrounding Leu300).
Species Reactivity:	Tested: Human, Rat, Mouse.
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing. Shelf life: one year from despatch.

Product Citations:**Purchased from Acris:**

1. Cruz-Orengo L, Daniels BP, Dorsey D, Basak SA, Grajales-Reyes JG, McCandless EE, et al. Enhanced sphingosine-1-phosphate receptor 2 expression underlies female CNS autoimmunity susceptibility. *J Clin Invest.* 2014 May 8. pii: 73408. doi: 10.1172/JCI73408. PubMed PMID: 24812668.

Originator or purchased from resellers:

1. Huang K, Liu W, Lan T, Xie X, Peng J, Huang J, et al. Berberine reduces fibronectin expression by suppressing the S1P-S1P2 receptor pathway in experimental diabetic nephropathy models. *PLoS One.* 2012;7(8):e43874. doi: 10.1371/journal.pone.0043874. Epub 2012 Aug 24. PubMed PMID: 22937115.

Pictures:

Western blo (WB) analysis of EDG-5 antibody Cat.-No AP01311PU-N) at 1/500 dilution: Lane 1: HEK293T whole cell lysate. Lane 2: Raw264.7 whole cell lysate. Lane 3: H9C2 whole cell lysate.

