

S1PR2 Antibody

Catalog # ASC11940

Specification

S1PR2 Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW

Application Notes

WB, IHC-P, IF, E <u>095136</u> <u>NP_004221</u>, <u>9294</u> Human, Mouse, Rat Rabbit Polyclonal IgG Predicted: 39 kDa

Observed: 50 kDa KDa S1PR2 antibody can be used for detection of S1PR2 by Western blot at 1 - 2 µg/ml. Antibody can also be used for immunohistochemistry at 10 µg/ml.

S1PR2 Antibody - Additional Information

Gene ID Target/Specificity 9294

Reconstitution & Storage S1PR2 antibody can be stored at 4°C for three months and -20°C, stable for up to one year.

Precautions S1PR2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

S1PR2 Antibody - Protein Information

Name S1PR2

Synonyms EDG5

Function

Receptor for the lysosphingolipid sphingosine 1-phosphate (S1P) (PubMed:10617617, PubMed:25274307). S1P is a bioactive lysophospholipid that elicits diverse physiological effects on most types of cells and tissues (PubMed:10617617). When expressed in rat HTC4 hepatoma cells, is capable of mediating S1P-induced cell proliferation and suppression of apoptosis (PubMed:10617617). Receptor for



the chemokine-like protein FAM19A5 (PubMed:29453251). Mediates the inhibitory effect of FAM19A5 on vascular smooth muscle cell proliferation and migration (By similarity). In lymphoid follicles, couples the binding of S1P to the activation of GNA13 and downstream inhibition of AKT activation leading to suppression of germinal center (GC) B cell growth and migration outside the GC niche.

Cellular Location

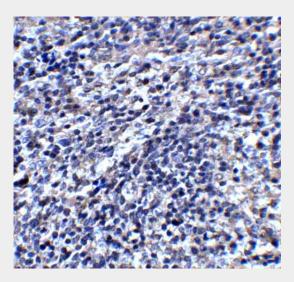
Cell membrane; Multi-pass membrane protein

S1PR2 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

S1PR2 Antibody - Images



Immunohistochemistry of ORAI3 in mouse spleen tissue with ORAI3 antibody at 2 µg/mL.

S1PR2 Antibody - Background

The Sphingosine 1-phosphate receptor 2 (S1PR2) protein was initially identified as G-protein coupled receptor thought to be involved in development (1) and was found to mediate sphingosine 1-phosphate (SPP)-induced cell rounding and neurite retraction (2). S1PR2 and the related protein S1PR3 (also known as EDG3) are also thought to mediate the SPP-induced cell proliferation, survival, and related signaling events (3). S1PR2 has also been found to be key regulator in acute vascular inflammation and may be a novel therapeutic target for vascular disorders (4).

S1PR2 Antibody - References



MacLennan AJ, Browe CS, Gaskin AA, et al. Cloning and characterization of a putative G-protein coupled receptor potentially involved in development. Mol. Cell Neurosci. 1994; 5:201-9. Van Brocklyn JR, Tu Z, Edsall LC, et al. Sphingosine 1-phosphate-induced cell rounding and neurite retraction are mediated by the G protein-coupled receptor H218. J. Biol. Chem. 1999; 274:4626-32. An S, Zheng Y, and Bleu T. Sphingosine 1-phosphate-induced cell proliferation, survival, and related signaling events mediated by G protein-coupled receptors Edg3 and Edg5. J. Biol. Chem. 275:288-96.

Zhang G, Yang L, Kim GS, et al. Critical role of sphingosine-1-phosphate receptor 2 (S1PR2) in acute vascular inflammation. Blood 2013; 122:443-55.