

PRODUCT INFORMATION



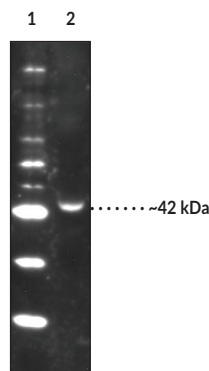
S1P₁ Polyclonal Antibody (protein A-purified)

Item No. 20208

Overview and Properties

Contents:	This vial contains 500 µl of protein A-purified polyclonal antibody.
Synonyms:	EDG-1, S1PR1, Sphingosine-1-phosphate Receptor 1
Immunogen:	Peptide from the internal region of human S1P ₁
Species Reactivity:	(+) Human, mouse, porcine, and rat S1P ₁ ; other species not tested
Uniprot No.:	P21453
Form:	Liquid
Storage:	-20°C (as supplied)
Stability:	≥3 years
Storage Buffer:	TBS, pH 7.4, with 50% glycerol, 0.1% BSA, and 0.02% sodium azide
Host:	Rabbit
Applications:	Western blot (WB); the recommended starting dilution is 1:200. Other applications were not tested, therefore optimal working concentration/dilution should be determined empirically.

Image



Lane 1: Precision Plus Protein Standards (3 µl)
Lane 2: Mouse Brain Supernatant (50 µg)

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY
Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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Description

Sphingosine-1-phosphate (S1P) exerts its activity by binding to five distinct G protein-coupled receptors, S1P₁/EDG-1, S1P₂/EDG-5, S1P₃/EDG-3, S1P₄/EDG-6, and S1P₅/EDG-8.^{1,2} S1P₁ primarily couples with pertussis toxin-sensitive G_{i/o} proteins to mediate S1P-induced cell proliferation, survival, migration, cytoskeletal organization, and morphogenesis.¹⁻³ Expression of S1P₁ is abundant in embryological vasculature and is ubiquitously expressed in adult cells, suggesting diverse physiological functions of this receptor.² The human and mouse S1P₁ receptors have 382 amino acids with an estimated molecular weight of 43 kDa. Glycosylation at the N-terminal extracellular domain may cause the protein to migrate at a higher position in SDS-PAGE.⁴ Cayman's S1P₁ Polyclonal Antibody (protein A-purified) can be used for western blot applications. The antibody recognizes S1P₁ at 42 kDa from human, mouse, porcine, and rat samples.

References

1. Takuwa, Y., Takuwa, N., and Sugimoto, N. The Edg family G protein-coupled receptors for lysophospholipids: Their signaling properties and biological activities. *J. Biochem.* **131**, 767-771 (2002).
2. Ishii, I., Fukushima, N., Ye, X., *et al.* Lysophospholipid receptors: Signaling and biology. *Annu. Rev. Biochem.* **73**, 321-354 (2004).
3. Kluk, M.J. and Hla, T. Signaling of sphingosine-1-phosphate *via* the S1P/EDG-family of G-protein-coupled receptors. *Biochim. Biophys. Acta* **1582**, 72-80 (2002).
4. Kohno, T., Wada, A., and Igarashi, Y. N-glycans of sphingosine 1-phosphate receptor Edg-1 regulate ligand-induced receptor internalization. *FASEB J.* **16**, 983-992 (2002).

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