

**Anti-Sphingosine-1-phosphate Reference Antibody (Expression DD patent anti-SIP)
Recombinant Antibody
Catalog # APR11039****Specification****Anti-Sphingosine-1-phosphate Reference Antibody (Expression DD patent anti-SIP) -
Product Information**

Application	FC, Kinetics, Animal Model
Primary Accession	Q9BX95
Reactivity	Human
Clonality	Monoclonal
Isotype	IgG1
Calculated MW	150 KDa

**Anti-Sphingosine-1-phosphate Reference Antibody (Expression DD patent anti-SIP) -
Additional Information****Target/Specificity**

Sphingosine-1-phosphate

Endotoxin

< 0.001EU/ µg,determined by LAL method.

Conjugation

Unconjugated

Expression system

CHO Cell

Format

Purified monoclonal antibody supplied in PBS, pH6.0, without preservative.This antibody is purified through a protein A column.

**Anti-Sphingosine-1-phosphate Reference Antibody (Expression DD patent anti-SIP) -
Protein Information****Name** SGPP1 ([HGNC:17720](#))**Function**

Specifically dephosphorylates sphingosine 1-phosphate (S1P), dihydro-S1P, and phyto-S1P. Does not act on ceramide 1-phosphate, lysophosphatidic acid or phosphatidic acid (PubMed:16782891).

Sphingosine-1-phosphate phosphatase activity is needed for efficient recycling of sphingosine into the sphingolipid synthesis pathway (PubMed:11756451, PubMed:12815058, PubMed:16782891). Regulates the intracellular levels of the bioactive sphingolipid metabolite S1P that regulates diverse biological processes acting both as an extracellular receptor

ligand or as an intracellular second messenger (PubMed:11756451, PubMed:12815058, PubMed:16782891). Involved in efficient ceramide synthesis from exogenous sphingoid bases. Converts S1P to sphingosine, which is readily metabolized to ceramide via ceramide synthase. In concert with sphingosine kinase 2 (SphK2), recycles sphingosine into ceramide through a phosphorylation/dephosphorylation cycle (By similarity). Regulates endoplasmic-to-Golgi trafficking of ceramides, resulting in the regulation of ceramide levels in the endoplasmic reticulum, preferentially long-chain ceramide species, and influences the anterograde membrane transport of both ceramide and proteins from the endoplasmic reticulum to the Golgi apparatus (PubMed:16782891). The modulation of intracellular ceramide levels in turn regulates apoptosis (By similarity). Via S1P levels, modulates resting tone, intracellular Ca(2+) and myogenic vasoconstriction in resistance arteries (PubMed:18583713). Also involved in unfolded protein response (UPR) and ER stress-induced autophagy via regulation of intracellular S1P levels (PubMed:18583713, PubMed:20798685). Involved in the regulation of epidermal homeostasis and keratinocyte differentiation (By similarity).

Cellular Location

Endoplasmic reticulum membrane; Multi-pass membrane protein. Cell membrane {ECO:0000250|UniProtKB:Q9JI99}; Multi-pass membrane protein

Tissue Location

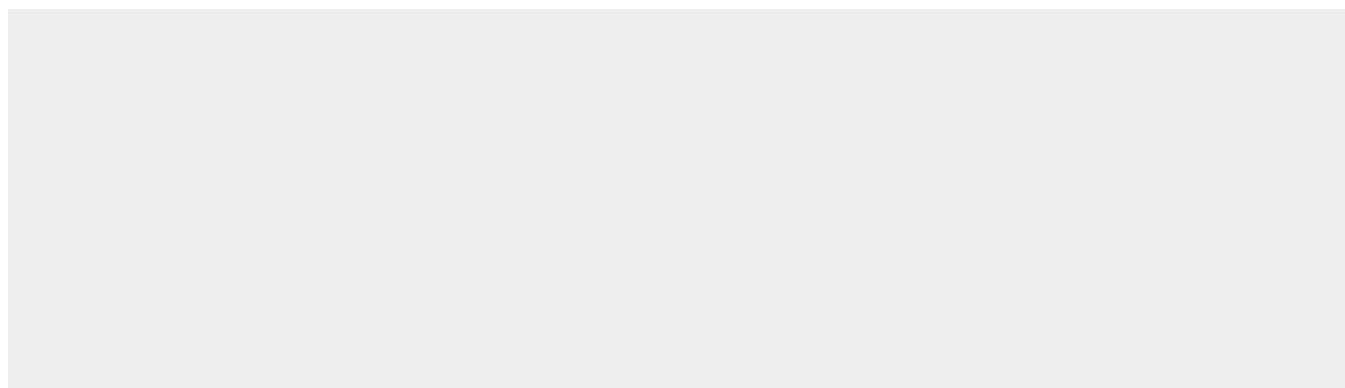
Ubiquitous, with the strongest level in placenta and kidney.

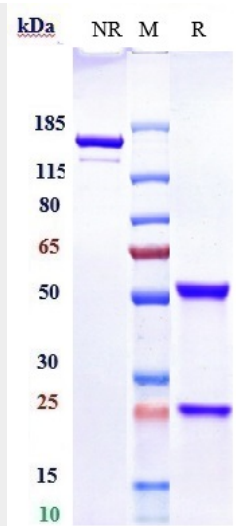
Anti-Sphingosine-1-phosphate Reference Antibody (Expression DD patent anti-SIP) - Protocols

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

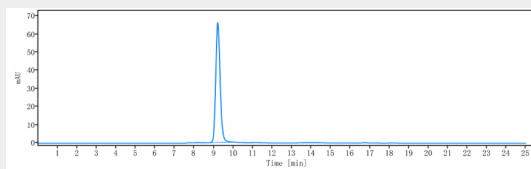
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-Sphingosine-1-phosphate Reference Antibody (Expression DD patent anti-SIP) - Images





Anti-Sphingosine-1-phosphate Reference Antibody (Expression DD patent anti-SIP) on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%



The purity of Anti-Sphingosine-1-phosphate Reference Antibody (Expression DD patent anti-SIP) is more than 95% ,determined by SEC-HPLC.