

**Anti-Sphingosine-1-phosphate Reference Antibody (sonpcizumab)  
Recombinant Antibody  
Catalog # APR10344**

**Specification**

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**Anti-Sphingosine-1-phosphate Reference Antibody (sonpcizumab) - Product Information**

Application	FC, E, FTA
Primary Accession	<a href="#">O9BX95</a>
Reactivity	Human, Mouse
Clonality	Monoclonal
Isotype	IgG1
Calculated MW	146.4 KDa

**Anti-Sphingosine-1-phosphate Reference Antibody (sonpcizumab) - 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 (sonpcizumab) - 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:<a href="http://www.uniprot.org/citations/16782891" target="\_blank">16782891</a>). Sphingosine-1-phosphate phosphatase activity is needed for efficient recycling of sphingosine into the sphingolipid synthesis pathway (PubMed:<a href="http://www.uniprot.org/citations/11756451" target="\_blank">11756451</a>, PubMed:<a href="http://www.uniprot.org/citations/12815058" target="\_blank">12815058</a>, PubMed:<a href="http://www.uniprot.org/citations/16782891" target="\_blank">16782891</a>). 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:<a href="http://www.uniprot.org/citations/11756451" target="\_blank">11756451</a>, PubMed:<a

href="http://www.uniprot.org/citations/12815058" target="\_blank">12815058</a>, PubMed:<a href="http://www.uniprot.org/citations/16782891" target="\_blank">16782891</a>). 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:<a href="http://www.uniprot.org/citations/16782891" target="\_blank">16782891</a>). 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:<a href="http://www.uniprot.org/citations/18583713" target="\_blank">18583713</a>). Also involved in unfolded protein response (UPR) and ER stress-induced autophagy via regulation of intracellular S1P levels (PubMed:<a href="http://www.uniprot.org/citations/18583713" target="\_blank">18583713</a>, PubMed:<a href="http://www.uniprot.org/citations/20798685" target="\_blank">20798685</a>). 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.

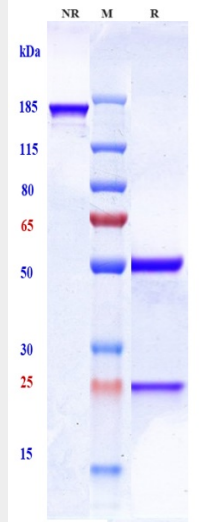
### Anti-Sphingosine-1-phosphate Reference Antibody (sonpizumab) - Protocols

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

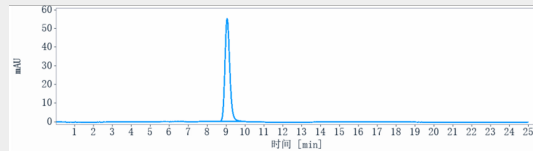
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### Anti-Sphingosine-1-phosphate Reference Antibody (sonpizumab) - Images





Anti-Sphingosine-1-phosphate Reference Antibody (sonpizumab) 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 (sonpizumab) is more than 98.9% ,determined by SEC-HPLC.