

Sphingosine 1-Phosphate Antibody (LT1002)

Z-P300

Support: echelon@echelon-inc.com

Description:

Mouse monoclonal antibody targeting Sphingosine 1-Phosphate (S1P)

Applications:

IHC – 1:50¹

ELISA – 1:1000²

Lipid Protein Overlay – not recommended

Other in vitro and cellular applications are possible using this antibody but have not been verified by Echelon Biosciences.

Properties:

Form – liquid

Storage instructions – Antibody is stable for up to 1 year at -20°C. Antibody is stable at 4°C for up to 60 days. Avoid repeated freeze/thaw cycles.

Storage buffer – PBS, pH 7.4

Concentration – 1 mg/mL

Purity – Protein G affinity purified

Immunogen – Thiolated S1P conjugated to KLH

Clonality – monoclonal; clone LT1002

Isotype – IgGk1

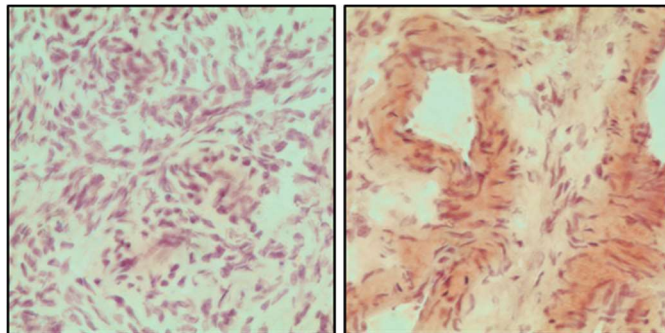
Specificity:

Limited cross reactivity with other lipids based on data from a competitive ELISA².

Background:

Sphingosine 1-Phosphate (S1P) is a key component of the sphingolipid signaling cascade. S1P initiates a proliferative, pro-angiogenic and anti-apoptotic sequence of events contributing to cancer progression. Recently, scientific literature has suggested that S1P is a potent tumorigenic growth factor that is likely released from tumor cells and that S1P may be a novel biomarker for early-stage cancer detection.

Data: Immunofluorescence



Frozen human ovary tissue was sectioned at 5µm and mounted to glass histology slides. Sections were stained with either S1P Antibody (clone LT1002) in conjunction with an HRP-conjugated secondary antibody or with secondary alone

References:

1. Visentin B, Reynolds G, Sabbadini R. (2012) Immunohistochemical detection of sphingosine-1-phosphate and sphingosine kinase-1 in human tissue samples. *Methods Mol Biol.* 874:55-67.
2. O'Brien N, Jones ST, Williams DG, Cunningham HB, Moreno K, Visentin B, et al. (2009) Production and characterization of monoclonal anti sphingosine-1-phosphate antibodies. *J Lipid Res.*;50(11):2245-57.
3. Swaney JS, Moreno KM, Gentile AM, Sabbadini RA, Stoller GL. (2008) Sphingosine-1-phosphate (S1P) is a novel fibrotic mediator in the eye. *Exp Eye Res.* ;87(4):367-75.

Related Products:

Products	Catalog Number
Assays and Reagents	
S1P ELISA	K-1900
S1P	S-2000
S1P Lyase, active	E-5000P
Lipids and Antibodies	
S1P Fluorescein	S-200F
S1P Lyase, Fluorogenic Substrate	S-200U

S1P antibody (LT1002) was originally developed and patented at Lpath Therapeutics.

Technical Data Sheet, Rev 2b, 07-03-24 – **For research use only.** Not intended for diagnostic or therapeutic use.