

Sphingosine 1-Phosphate Lyase 1. Rabbit Antigen Immunoaffinity Purified Polyclonal , Human, Mouse, Rat, Bovine

EC 4.1.2.27, SP-lyase, hSPL or Sphingosine-1-phosphate aldolase. Gene name: SGPL1 or KIAA1252

BACKGROUND

Sphingosine-1-phosphate lyase cleaves phosphorylated sphingoid bases, such as sphingosine-1-phosphate, into fatty aldehydes and phosphoethanolamine. Elevates stress-induced ceramide production and apoptosis. The catalytic activity of sphingosine 1-phosphate lyase converts sphingosine 1-phosphate to phosphoethanolamine and palmitaldehyde using Pyridoxal phosphate as a co-factor. Sphingosine 1-phosphate lyase is a type III membrane protein found in the endoplasmic reticulum. Sphingosine 1-phosphate lyase is found primarily in the liver and kidney. Sphingosine 1-phosphate lyase belongs to the group II decarboxylase family.

ORDERING INFORMATION

CATALOG NUMBER
X1631P

SIZE
10 Miniblots

FORM
Unconjugated

HOST/CLONE
Rabbit

FORMULATION
Provided as ligand affinity purified antibody in phosphate buffered saline with 0.08% sodium azide

CONCENTRATION
Lot specific, see vial label

ISOTYPE
IgG

APPLICATIONS
Western Blot

IMMUNOGEN

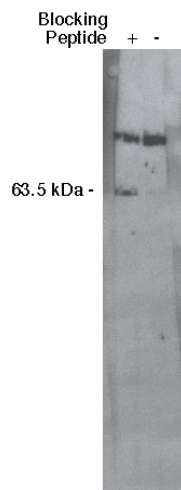
Synthetic peptide derived from the sphingosine 1-phosphate lyase 1 protein.

SPECIES REACTIVITY

Human, Mouse, Rat, Bovine

Legend:

Western blot analysis using S1P lyase 1 antibody at a dilution of 1:400 on MDBK cell lysate (Cat. No. X1007) using Exalpha's mouse anti-rabbit HRP secondary antibody (Cat. No. X1207M) at 1:75,000.



For research use only. Not for use in human diagnostics or therapeutics.

POSITIVE CONTROL/TISSUE EXPRESSION

Madin-Darby Bovine Kidney (MDBK) cell lysate (Cat. No. X1007)

COMMENTS

Antibody can be used for Western blotting (1:400 dilution). Other applications not yet tested. Optimal concentration should be evaluated by serial dilutions.

SHIP CONDITIONS

Ship on dry ice, freeze upon arrival

STORAGE CUSTOMER

Product should be stored at -20°C. Aliquot to avoid freeze/thaw cycles

STABILITY

Products are stable for one year from purchase when stored properly

REFERENCES

1. Van Veldhoven P.P., et al; "Human sphingosine-1-phosphate lyase: cDNA cloning, functional expression studies and mapping to chromosome 10q22." *Biochim. Biophys. Acta* 1487:128-134 (2000).
2. Reiss U., et al; "Sphingosine-phosphate lyase enhances stress-induced ceramide generation and apoptosis." *J. Biol. Chem.* 279:1281-1290(2004).
3. Nagase T., et al; "Prediction of the coding sequences of unidentified human genes. XV. The complete sequences of 100 new cDNA clones from brain which code for large proteins in vitro." *DNA Res.* 6:337-345(1999).
4. Strausberg R.L., et al; "Generation and initial analysis of more than 15,000 full-length human and mouse cDNA sequences." *Proc. Natl. Acad. Sci. U.S.A.* 99:16899-16903(2002).

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