

## Sphingosine Kinase 1. Rabbit Polyclonal Antibody , Human, Rat, Mouse, Bovine

EC 2.7.1, SK 1, SPK 1, SPHK1, Gene name: SPHK1 or SPHK or SP

### BACKGROUND

Sphingosine Kinase 1 (Sphk1) catalyzes the phosphorylation of sphingosine to sphingosine 1-phosphate (S1P), an important signaling molecule with intra- and extracellular functions. Inside the cell S1P acts as a signaling molecule like other sphingolipid metabolites like ceramide and sphingosine. S1P has been implicated in regulating cell differentiation, calcium mobilization from intracellular stores, and apoptosis. The cell surface receptors for S1P are the EDG family of G protein-coupled receptors (S1P Receptors). These receptors couple to multiple G proteins (e.g. S1P<sub>1</sub> couples to Gi whereas S1P<sub>2</sub> and S1P<sub>3</sub> couple to Gq, G13 in addition to Gi) and regulate a extremely wide range of cellular events including cell motility, survival, apoptosis, migration and cell-cell interaction. Important roles for S1P have also been reported in regulation of cardiogenesis, vascular maturation, oocyte survival, immune cell trafficking, cells of the neuronal system and bone cells. S1P levels are regulated by the activity of Sphk (Sphk1 and Sphk2).

### ORDERING INFORMATION

**CATALOG NUMBER**  
X1627P

**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, ELISA

### IMMUNOGEN

Synthetic peptide derived from the C-terminal of human Sphingosine Kinase 1

### SPECIES REACTIVITY

Human, Rat, Mouse, Bovine

### Legend:

Western blot analysis using Sphingosine Kinase 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) and ELISA. 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**

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