

## Sphingosine Kinase 1/SPHK1 Protein, Human, Recombinant (His & GST)

### General Information

Synonyms:	SPHK;SPHK1;SPK;sphingosine kinase 1
Protein Construction:	A DNA sequence encoding the human SPHK1 (Q9NYA1-1)(Met1-Leu384) was expressed the N-terminal polyhistidine-tagged GST tag at the N-terminus. Predicted N terminal: Met
Species:	Human
Expression Host:	Baculovirus Insect Cells
Accession:	Q9NYA1-1
Molecular Weight:	70.3 kDa (predicted); 64 kDa (reducing condition, due to glycosylation)

### QC Testing

Biological Activity:	Kinase activity untested
Purity:	> 95 % as determined by SDS-PAGE
Endotoxin:	< 1.0 EU/μg of the protein as determined by the LAL method.
Formulation:	Supplied as sterile 20 mM Tris, 500 mM NaCl, 3 mM DTT, 10% glycerol, pH 8.0.

### Preparation and Storage

#### Reconstitution:

A Certificate of Analysis (CoA) containing reconstitution instructions is included with the products. Please refer to the CoA for detailed information.

#### Stability & Storage:

It is recommended to store the product under sterile conditions at -20°C to -80°C. Samples are stable for up to 12 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

#### Shipping:

Proteins are shipped with blue ice.

### Protein Background

SPHK1, also known as sphingosine Kinase 1, catalyzes the phosphorylation of sphingosine to form sphingosine-1-phosphate (S1P). S1P exhibits a broad spectrum of biological activities including cell proliferation, survival, migration, cytoskeletal organization, and morphogenesis. It is a ligand for cell surface G protein-coupled receptors. SPHK 1 is a potential therapeutic target for the control of cancer and inflammation. SPHK1 plays a key role in TNF-alpha signaling and the NF-kappa-B activation pathway important in inflammatory, antiapoptotic, and immune processes.

Reference

Kohama T. et al., 1998, J Biol Chem. 273 (37): 23722-8.

Xia P. et al., 2002, J Biol Chem. 277 (10): 7996-8003.

Tsukahara T. et al., 2002, Tanpakushitsu Kakusan Koso. 47 (4): 509-13.

**Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins**

This product is for Research Use Only· Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E\_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481