

# Recombinant Human SPHK1/Sphingosine Kinase 1 Protein



Catalog Number:PKSH030315

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

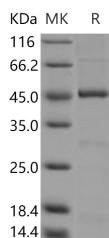
## Description

|                                    |                                                                                                              |
|------------------------------------|--------------------------------------------------------------------------------------------------------------|
| <b>Synonyms</b>                    | SPHK;SPHK1;SPK                                                                                               |
| <b>Species</b>                     | Human                                                                                                        |
| <b>Expression Host</b>             | Baculovirus-Insect Cells                                                                                     |
| <b>Sequence</b>                    | Met 1-Leu 384                                                                                                |
| <b>Accession</b>                   | Q9NYA1-1                                                                                                     |
| <b>Calculated Molecular Weight</b> | 42.7 kDa                                                                                                     |
| <b>Observed molecular weight</b>   | 46 kDa                                                                                                       |
| <b>Tag</b>                         | None                                                                                                         |
| <b>Bioactivity</b>                 | The specific activity was determined to be 1028 nmol/min/mg using Sphingosine Kinase Substrate as substrate. |

## Properties

|                       |                                                                                                                                                  |
|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Purity</b>         | > 85 % as determined by reducing SDS-PAGE.                                                                                                       |
| <b>Endotoxin</b>      | < 1.0 EU per µg of the protein as determined by the LAL method.                                                                                  |
| <b>Storage</b>        | Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.                                                                       |
| <b>Shipping</b>       | This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at < - 20°C. |
| <b>Formulation</b>    | Supplied as sterile solution of 20mM Tris, 500mM NaCl, 10% glycerol, pH 8.0                                                                      |
| <b>Reconstitution</b> | Not Applicable                                                                                                                                   |

## Data



> 85 % as determined by reducing SDS-PAGE.

## 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.

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