Recombinant Human SPHK1 Protein (Ser148-Leu398), His tagged

Cat. No. SPHK1-6675H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant human SPHK1 (Ser148-Leu398) fused with His tag was expressed in E. coli.
Species	Human
Source	E.coli
ProteinLength	Ser148-Leu398
Description	Catalyzes the phosphorylation of sphingosine to form sphingosine 1-phosphate (SPP), a lipid mediator with both intra- and extracellular functions. Also acts on D-erythro-sphingosine and to a lesser extent sphinganine, but not other lipids, such as D, L-threo-dihydrosphingosine, N, N-dimethylsphingosine, diacylglycerol, ceramide, or phosphatidylinositol. In contrast to proapoptotic SPHK2, has a negative effect on intracellular ceramide levels, enhances cell growth and inhibits apoptosis. Involved in the regulation of inflammatory response and neuroinflammation. Via the product sphingosine 1-phosphate, stimulates TRAF2 E3 ubiquitin ligase activity, and promotes activation of NF-kappa-B in response to TNF signaling leading to IL17 secretion. In response to TNF and in parallel to NF-kappa-B activation, negatively regulates RANTES induction through p38 MAPK signaling pathway. Involved in endocytic membrane trafficking induced by sphingosine, recruited to dilate endosomes, also plays a role on later stages of endosomal maturation and membrane fusion independently of its kinase activity. In Purkinje cells, seems to be

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	also involved in the regulation of autophagosome-lysosome fusion upon VEGFA.
Form	Lyophilized powder/frozen liquid
Molecular Mass	28.51 kDa
Purity	> 90 % as determined by SDS-PAGE
Notes	For research use only.
Storage	Use a manual defrost freezer and avoid repeated freeze thaw cycles. Store at 2 to 8 centigrade for one week. Store at -20 to -80 centigrade for twelve months from the date of receipt.
Storage Buffer	Supplied as solution form in PBS, pH 7.5 or lyophilized from PBS, pH 7.5.
Reconstitution	Reconstitute in sterile water for a stock solution.
Shipping	They are shipped out with dry ice/blue ice unless customers require otherwise.

GENE INFORMATION

Gene Name	SPHK1 sphingosine kinase 1 [Homo sapiens (human)]
Official Symbol	SPHK1
Synonyms	SPHK1; sphingosine kinase 1; SPHK; SK 1; SPK 1;
Gene ID	8877
mRNA Refseq	NM_001142601

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Protein Refseq	NP_001136073
MIM	603730
UniProt ID	Q9NYA1

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