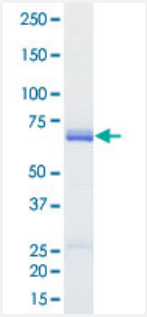
Bioactive Full-Length

SPHK1 (Human) Recombinant Protein

Catalog # P5670 Size 5 ug

Applications



Result of activity analysis

Result of activity analysis

Specification

Product Description	Human SPHK1 (NP_001136074.1, 1 a.a. - 384 a.a.) full-length recombinant protein with GST tag expressed in baculovirus infected Sf21 cells.
Host	insect
Theoretical MW (kDa)	69
Form	Liquid
Preparation Method	Baculovirus infected insect cell (Sf21) expression system
Purification	Glutathione sepharose chromatography
Purity	91 % by SDS-PAGE/CBB staining

Activity	The activity was measured by off-chip mobility shift assay. The enzyme was incubated with fluorescence-labeled substrate and Mg(or Mn)/ATP. The phosphorylated and unphosphorylated substrates were separated and detected by LabChip 3000. Substrate: Sphingosine. ATP: 100 uM.
Quality Control Testing	Loading 1 ug protein in SDS-PAGE
Storage Buffer	In 50 mM Tris-HCl, 150 mM NaCl, pH 7.5 (0.05% Brij35, 1 mM DTT, 10% glycerol)
Storage Instruction	Store at -80°C. Aliquot to avoid repeated freezing and thawing.
Note	Result of activity analysis Result of activity analysis

Applications

- Functional Study
- SDS-PAGE

Gene Info — SPHK1

Entrez GeneID	8877
Protein Accession#	NP_001136074.1
Gene Name	SPHK1
Gene Alias	SPHK
Gene Description	sphingosine kinase 1
Omim ID	603730
Gene Ontology	Hyperlink
Gene Summary	Sphingosine-1-phosphate (SPP) is a novel lipid messenger with both intracellular and extracellular functions. Intracellularly, it regulates proliferation and survival, and extracellularly, it is a ligand for EDG1 (MIM 601974). Various stimuli increase cellular levels of SPP by activation of sphingosine kinase (SPHK), the enzyme that catalyzes the phosphorylation of sphingosine. Competitive inhibitors of SPHK block formation of SPP and selectively inhibit cellular proliferation induced by a variety of factors, including platelet-derived growth factor (e.g., MIM 173430) and serum.[supplied by OMIM
Other Designations	-

Pathway

- Calcium signaling pathway
- Fc gamma R-mediated phagocytosis
- Metabolic pathways
- Sphingolipid metabolism
- VEGF signaling pathway