

SphK2 (phospho Thr614) Polyclonal Antibody

Catalog No :	YP1108
Reactivity :	Human;Mouse;Rat
Applications :	IHC;IF;WB;ELISA
Target :	SphK2
Fields :	>>Sphingolipid metabolism;>>Metabolic pathways;>>Calcium signaling pathway;>>Sphingolipid signaling pathway;>>Phospholipase D signaling pathway;>>VEGF signaling pathway;>>Apelin signaling pathway;>>Fc gamma R-mediated phagocytosis;>>Tuberculosis
Gene Name :	SPHK2
Protein Name :	Sphingosine kinase 2
Human Gene Id :	56848
Human Swiss Prot No :	Q9NRA0
Mouse Gene Id :	56632
Mouse Swiss Prot No :	Q9JIA7
Immunogen :	The antiserum was produced against synthesized peptide derived from human SPHK2 around the phosphorylation site of Thr614. AA range:580-629
Specificity :	Phospho-SphK2 (T614) Polyclonal Antibody detects endogenous levels of SphK2 protein only when phosphorylated at T614.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Polyclonal, Rabbit,IgG
Dilution :	WB 1:500-2000 IHC 1:100 - 1:300. ELISA: 1:5000.. IF 1:50-200
Purification :	The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration : 1 mg/ml

Storage Stability : -15°C to -25°C/1 year(Do not lower than -25°C)

Molecularweight : 69kD

Cell Pathway : Sphingolipid metabolism;Calcium;VEGF;Fc gamma R-mediated phagocytosis;

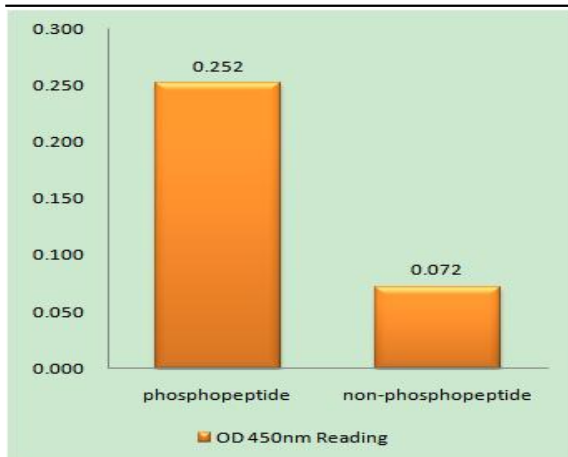
Background : This gene encodes one of two sphingosine kinase isozymes that catalyze the phosphorylation of sphingosine into sphingosine 1-phosphate. Sphingosine 1-phosphate mediates many cellular processes including migration, proliferation and apoptosis, and also plays a role in several types of cancer by promoting angiogenesis and tumorigenesis. The encoded protein may play a role in breast cancer proliferation and chemoresistance. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene. [provided by RefSeq, Aug 2011],

Function : alternative products:Experimental confirmation may be lacking for some isoforms,catalytic activity:ATP + sphinganine = ADP + sphinganine 1-phosphate.,catalytic activity:ATP + sphingosine = ADP + sphingosine 1-phosphate.,cofactor:Magnesium.,function: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-dihydrosphingosine, D-erythro-sphingosine and L-threo-dihydrosphingosine.,similarity:Contains 1 DAGKc domain.,

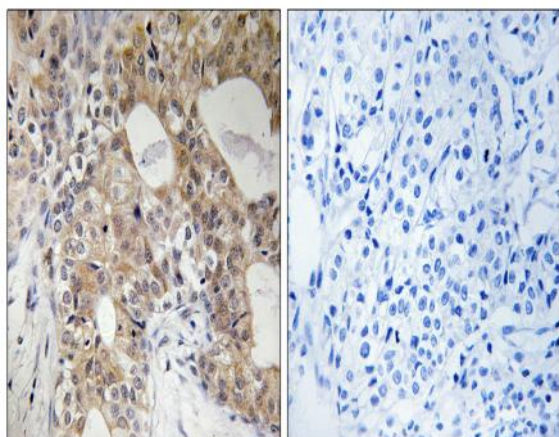
Subcellular Location : Cytoplasm . Nucleus . Endoplasmic reticulum . Mitochondrion inner membrane . In nucleus, located in nucleosomes where it associates with core histone proteins such as histone 3 (PubMed:19729656). In brains of patients with Alzheimer's disease, may be preferentially localized in the nucleus. Cytosolic expression decrease correlates with the density of amyloid deposits (PubMed:29615132). In apoptotic cells, colocalizes with CASP1 in cell membrane where is cleaved and released from cells in an active form (PubMed:20197547). .; [Isoform 2]: Lysosome membrane .

Expression : Mainly expressed in adult kidney, liver, and brain (PubMed:10751414). Expressed in cerebral cortex and hippocampus (at protein level) (PubMed:29615132). Isoform 1 is the predominant form expressed in most tissues (PubMed:16103110).

Products Images



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using SPHK2 (Phospho-Thr614) Antibody



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma, using SPHK2 (Phospho-Thr614) Antibody. The picture on the right is blocked with the phospho peptide.