



SphK2 (phospho Thr614) Polyclonal Antibody

Catalog No	YP-Ab-14565
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	IHC;IF;WB;ELISA
Gene Name	SPHK2
Protein Name	Sphingosine kinase 2
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
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-2000 IHC: 1/100 - 1/300. ELISA: 1/5000.. IF 1:50-200
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	SPHK2; Sphingosine kinase 2; SK 2; SPK 2
Observed Band	
Cell Pathway	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 .
Tissue Specificity	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).
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.,

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],

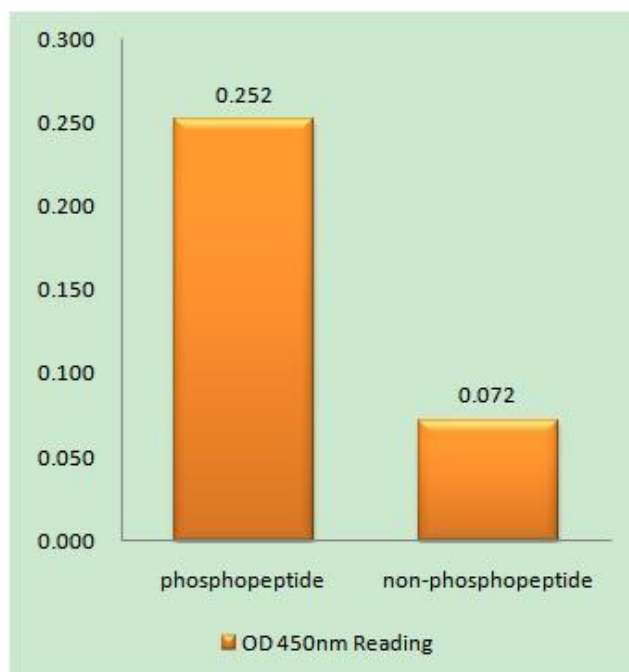
matters needing attention

Avoid repeated freezing and thawing!

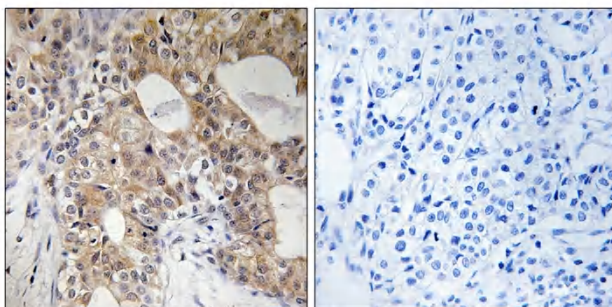
Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

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 phosphopeptide.