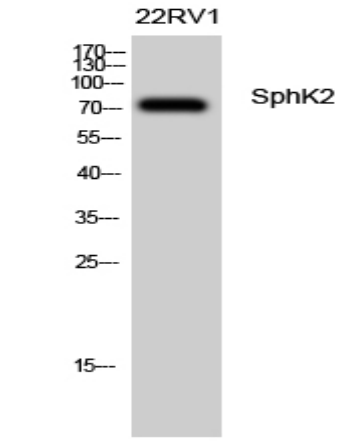
Best Tools for immunology Research

SphK2 Polyclonal Antibody

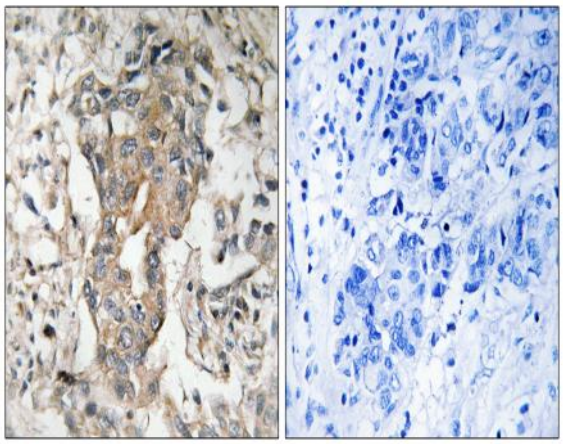
Catalog No :	YT4383
Reactivity :	Human;Mouse;Rat
Applications :	WB;IHC;IF;ELISA
Target :	SphK2
Fields :	>>Sphingolipid metabolism;>>Metabolic pathways;>>Calcium signaling pathway;>>Sphingolipid signaling pathway;>>Phospholipase D signaling pathway;>>VEGF signaling pathway;>>Apelin signaling pathway;>>Fc 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. AA range:580-629
Specificity :	SphK2 Polyclonal Antibody detects endogenous levels of SphK2 protein.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Polyclonal, Rabbit,IgG
Dilution :	WB 1:500 - 1:2000. 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)
Observed Band :	70kD
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).

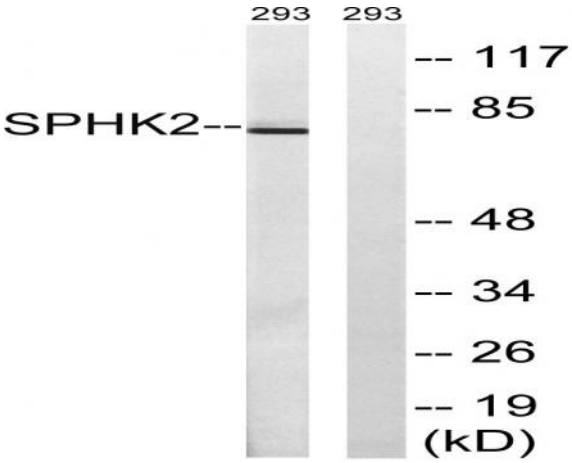
Products Images



Western Blot analysis of 22RV1 cells using SphK2 Polyclonal Antibody diluted at 1:500



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma tissue, using SPHK2 Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from 293 cells, using SPHK2 Antibody. The lane on the right is blocked with the synthesized peptide.