SNF1LK Antibody – Rabbit Polyclonal

PRODUCT OVERVIEW

Product Name	SNF1LK, Polyclonal Antibody
Full Product Name	SNF1LK, CT (Serine/Threonine Protein Kinase SIK1, Salt-inducible Protein Kinase 1, SIK-1, Serine/Threonine-protein Kinase SNF1-like Kinase 1, Serine/Threonine-protein Kinase SNF1LK, SIK1, SIK) (MaxLight 650)
Product Gene Name	anti-SNF1LK antibody
Clonality	Polyclonal
Isotype	IgG
Host	Rabbit
Species Reactivity	Human
Form/Format	Supplied as a liquid in PBS, pH 7.2. No preservative added. Labeled with MaxLight650.
Purity/Purification	Purified by Protein G Affinity Chromatography.
Specificity	Recognizes human SNF1LK.
Preparation and Storage	Store product at 4 degree C in the dark. DO NOT FREEZE! Stable at 4 degree C for 12 months after receipt as an undiluted liquid. Dilute required amount only prior to immediate use. Further dilutions can be made in assay buffer. Caution: MaxLight650 conjugates are sensitive to light. For maximum recovery of product, centrifuge the original vial prior to removing the cap.
Molecular Weight	84,902 Da
Chromosome Location	Chromosome: 21; NC_000021.8 (44834395..44847002, complement). Location: 21q22.3
OMIM	605705
3D Structure	ModBase 3D Structure for P57059
Immunogen	Synthetic peptide selected from the C-terminal region of human SNF1LK (KLH).
Conjugate	MaxLight650
Note	Preservative Free
Product Categories/Family for anti-SNF1LK antibody	Antibodies; Protein Kinases
Applications Tested/Suitable for anti-SNF1LK antibody	Immunohistochemistry (IHC), FLISA, Western Blot (WB)
Application Notes for anti-SNF1LK antibody	IHC: 1:50-1:100 FLISA: 1:1,000 WB: 1:100-1:500 Applications are based on unconjugated antibody.
Related Product Information for anti-SNF1LK antibody	MBS6499553 is an antibody targeting SNF1LK. Also known as SNF1LK, CT (Serine/Threonine Protein Kinase SIK1, Salt-inducible Protein Kinase 1, SIK-1, Serine/Threonine-protein Kinase SNF1-like Kinase 1, Serine/Threonine-protein Kinase SNF1LK, SIK1, SIK) (MaxLight 650). Reactive in Human. Host: Rabbit.
Product References and Citations for anti-SNF1LK antibody	1. Hattori, M., et al., Nature 405(6784):311-319 (2000).

Other Notes	Small volumes of anti-SNF1LK antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for SNF1LK. It may not necessarily be applicable to this product.

NCBI GI #	116256471
NCBI GeneID	150094
NCBI Accession #	NP_775490.2
UniProt Primary Accession #	P57059
UniProt Secondary Accession #	Q5R2V5; Q6ZNL8; Q86YJ2; A6NC84
UniProt Related Accession #	P57059
GenBank Nucleotide #	NM_173354.3
NCBI Official Full Name	serine/threonine-protein kinase SIK1
NCBI Official Synonym Full Names	salt-inducible kinase 1
NCBI Official Symbol	SIK1
NCBI Official Synonym Symbols	MSK; SIK; SNF1LK
UniProt Protein Name	Serine/threonine-protein kinase SIK1
UniProt Synonym Protein Names	Salt-inducible kinase 1; SIK-1; Serine/threonine-protein kinase SNF1-like kinase 1
Protein Family	Serine/threonine-protein kinase
UniProt Gene Name	SIK1
UniProt Synonym Gene Names	SIK; SNF1LK; SIK-1
UniProt Entry Name	SIK1_HUMAN
NCBI Protein Information	serine/threonine-protein kinase SIK1; SIK-1; SNF1-like kinase; myocardial SNF1-like kinase; salt-inducible protein kinase 1; serine/threonine protein kinase; serine/threonine-protein kinase SNF1LK; serine/threonine-protein kinase SNF1-like kinase 1

UniProt Comments for SNF1LK	SIK: Serine/threonine-protein kinase involved in various processes such as cell cycle regulation, gluconeogenesis and lipogenesis regulation, muscle growth and differentiation and tumor suppression. Phosphorylates HDAC4, HDAC5, PPME1, SREBF1, TORC1/CRTC1 and TORC2/CRTC2. Acts as a tumor suppressor and plays a key role in p53/TP53-dependent anoikis, a type of apoptosis triggered by cell detachment: required for phosphorylation of p53/TP53 in response to loss of adhesion and is able to suppress metastasis. Part of a sodium-sensing signaling network, probably by mediating phosphorylation of PPME1: following increases in intracellular sodium, SIK1 is activated by CaMK1 and phosphorylates PPME1 subunit of protein phosphatase 2A (PP2A), leading to dephosphorylation of sodium/potassium-transporting ATPase ATP1A1 and subsequent increase activity of ATP1A1. Acts as a regulator of muscle cells by phosphorylating and inhibiting class II histone deacetylases HDAC4 and HDAC5, leading to promote expression of MEF2 target genes in myocytes. Also required during cardiomyogenesis by regulating the exit of cardiomyoblasts from the cell cycle via down-regulation of CDKN1C/p57Kip2. Acts as a regulator of hepatic gluconeogenesis by phosphorylating and repressing the CREB-specific coactivators TORC1/CRTC1 and TORC2/CRTC2, leading to inhibit CREB activity. Also regulates hepatic lipogenesis by phosphorylating and inhibiting SREBF1. Interacts with ATP1A1. Interacts (when phosphorylated on Thr-182 and Ser-186) with YWHAZ. Activated by phosphorylation on Thr-182. Also activated by phosphorylation on Thr-322 in response to increases in intracellular sodium in parallel with elevations in intracellular calcium through the reversible sodium/calcium exchanger. Belongs to the protein kinase superfamily. CAMK Ser/Thr protein kinase family. AMPK subfamily. Protein type: EC 2.7.11.1; Protein kinase, CAMK; Motility/polarity/chemotaxis; Tumor suppressor; Protein kinase, Ser/Thr (non-receptor); Kinase, protein; CAMK group; CAMKL family; QIK subfamily Chromosomal Location of Human Ortholog: 21q22.3 Cellular Component: cytoplasm; nucleus Molecular Function: protein serine/threonine kinase activity; protein binding; cAMP response element binding protein binding; magnesium ion binding; protein kinase binding; ATP binding Biological Process: negative regulation of gluconeogenesis; regulation of cell differentiation; protein amino acid autophosphorylation; regulation of mitotic cell cycle; rhythmic process; regulation of sodium ion transport; cell cycle; inhibition of CREB transcription factor; protein amino acid phosphorylation; cardiac muscle cell differentiation; entrainment of circadian clock by photoperiod Disease: Epileptic Encephalopathy, Early Infantile, 30
Research Articles on SNF1LK	**1.** SIK1 is required for myogenic differentiation; it's transcriptional regulation and regulated degradation comprise a unified molecular mechanism to precisely tune SIK1 activity in muscle cells.
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