Anti-MARK4 antibody

Description	Rabbit polyclonal to MARK4.

Model	STJ94018
Host	Rabbit
Reactivity	Human, Mouse
Applications	ELISA, IF
Immunogen	Synthesized peptide derived from human MARK4
Immunogen Region	430-510 aa, Internal
Gene ID	57787
Gene Symbol	MARK4
Dilution range	IF 1:200-1:1000ELISA 1:40000
Specificity	MARK4 Polyclonal Antibody detects endogenous levels of MARK4 protein.
Tissue Specificity	Ubiquitous. Isoform 2 is brain-specific . Expressed at highest levels in brain and testis. Also expressed in heart, lung, liver, muscle, kidney and spleen .
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Note	For Research Use Only (RUO).
Protein Name	MAP/microtubule affinity-regulating kinase 4 MAP/microtubule affinity-regulating kinase-like 1
Molecular Weight	83 kDa
Clonality	Polyclonal

Conjugation	Unconjugated
Isotype	IgG
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:13538OMIM:606495
Alternative Names	MAP/microtubule affinity-regulating kinase 4 MAP/microtubule affinity-regulating kinase-like 1
Function	Serine/threonine-protein kinase . Phosphorylates the microtubule-associated protein MAPT . Also phosphorylates the microtubule-associated proteins MAP2 and MAP4 . Involved in regulation of the microtubule network, causing reorganization of microtubules into bundles . Required for the initiation of axoneme extension during cilium assembly . Regulates the centrosomal location of ODF2 and phosphorylates ODF2 in vitro . Plays a role in cell cycle progression, specifically in the G1/S checkpoint . Reduces neuronal cell survival . Plays a role in energy homeostasis by regulating satiety and metabolic rate . Promotes adipogenesis by activating JNK1 and inhibiting the p38MAPK pathway, and triggers apoptosis by activating the JNK1 pathway . Phosphorylates mTORC1 complex member RPTOR and acts as a negative regulator of the mTORC1 complex, probably due to disruption of the interaction between phosphorylated RPTOR and the RRAGA/RRAGC heterodimer which is required for mTORC1 activation .
Cellular Localization	Cytoplasm, cytoskeleton, microtubule organizing center, centrosome Cytoplasm, cytoskeleton, microtubule organizing center Cytoplasm, cytoskeleton, cilium basal body Cytoplasm, cytoskeleton, cilium axoneme Cytoplasm. Localized at the tips of neurite-like processes in differentiated neuroblast cells. Detected in the cytoplasm and neuropil of the hippocampus.
Post-translational Modifications	Ubiquitinated with 'Lys-29'- and 'Lys-33'-linked polyubiquitins which appear to impede LKB1-mediated phosphorylation. Deubiquitinated by USP9X. Phosphorylated at Thr-214 by STK11/LKB1 in complex with STE20-related adapter-alpha (STRADA) pseudo kinase and CAB39 . Phosphorylated throughout the cell cycle .