

## Anti-MARK4 antibody

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

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| <b>Conjugation</b>                      | Unconjugated                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Isotype</b>                          | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Formulation</b>                      | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Concentration</b>                    | 1 mg/ml                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Storage Instruction</b>              | Store at -20°C, and avoid repeat freeze-thaw cycles.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Database Links</b>                   | <a href="#">HGNC:13538OMIM:606495</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Alternative Names</b>                | MAP/microtubule affinity-regulating kinase 4 MAP/microtubule affinity-regulating kinase-like 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Function</b>                         | 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 . |
| <b>Cellular Localization</b>            | Cytoplasm, cytoskeleton, microtubule organizing center, centrosome<br>Cytoplasm, cytoskeleton, microtubule organizing center<br>Cytoplasm, cytoskeleton, cilium basal body<br>Cytoplasm, cytoskeleton, cilium axoneme<br>Cytoplasm. Localized at the tips of neurite-like processes in differentiated neuroblast cells. Detected in the cytoplasm and neuropil of the hippocampus.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Post-translational Modifications</b> | 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 .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |