Catalog Number	A2445
Synonyms	SKS; FRAP; FRAP1; FRAP2; RAFT1; RAPT1; mTOR
Reactivity	Human,Mouse,Rat
Tested applications	ELISA,WB,IF/ICC,IP
Host species	Rabbit
Background	The protein encoded by this gene belongs to a family of phosphatidylinositol kinase-related kinases. These kinases mediate cellular responses to stresses such as DNA damage and nutrient deprivation. This kinase is a component of two distinct complexes, mTORC1, which controls protein synthesis, cell growth and proliferation, and mTORC2, which is a regulator of the actin cytoskeleton, and promotes cell survival and cell cycle progression. This protein acts as the target for the cell-cycle arrest and immunosuppressive effects of the FKBP12-rapamycin complex. Inhibitors of mTOR are used in organ transplants as immunosuppressants, and are being evaluated for their therapeutic potential in SARS-CoV-2 infections. Mutations in this gene are associated with Smith-Kingsmore syndrome and somatic focal cortical dysplasia type II. The ANGPTL7 gene is located in an intron of this gene.
Gene Id	2475
Isotype	IgG
Purity	Affinity purification
Swiss Prot	P42345
Recommended dilution	WB,1:1000 - 1:5000|IF/ICC,1:50 - 1:200|IP,0.5μg-4μg antibody for 200μg-400μg extracts of whole cells
CALCULATED MW	289kDa
OBSERVED MW	289kDa
IMMUNOGEN	Recombinant fusion protein containing a sequence corresponding to amino acids 1-300 of human mTOR (NP_004949.1).
POSITIVE SAMPLES	K-562,HeLa
CELLULAR LOCALIZATION	Cytoplasm,Cytoplasmic side,Endoplasmic reticulum membrane,Golgi apparatus membrane,Lysosome,Mitochondrion outer membrane,Nucleus,PML body,Peripheral membrane protein,
STORAGE BUFFER	Store at -20℃. Avoid freeze / thaw cycles.|Buffer: PBS with 0.02% sodium azide,50% glycerol,pH7.3.

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