mTOR (Phospho Thr2446) Rabbit pAb

CatalogNo: YP0384 Orthogonal Validated

Key Features

Host Species
- Rabbit

Reactivity
- Human,Mouse,Rat

Applications
- WB,IHC,ELISA

MW
- 220kD (Observed)

Isotype
- IgG

Storage

Storage*	-15°C to -25°C/1 year (Do not lower than -25°C)
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Recommended Dilution Ratios

WB 1:500-2000
IHC 1:50-300
ELISA 1:2000-20000

Basic Information

Clonality	Polyclonal

Immunogen Information

Immunogen	The antiserum was produced against synthesized peptide derived from human mTOR around the phosphorylation site of Thr2446. AA range:2412-2461
Specificity	Phospho-mTOR (T2446) Polyclonal Antibody detects endogenous levels of mTOR protein only when phosphorylated at T2446.The name of modified sites may be influenced by many factors, such as species (the modified site was not originally found in human samples) and the change of protein sequence (the previous protein sequence is incomplete, and the protein sequence may be prolonged with the development of protein sequencing technology). When naming, we will use the "numbers" in historical reference to keep the sites consistent with the reports. The antibody binds to the following modification sequence (lowercase letters are modification sites):TRtDS

Target Information

Gene name MTOR

Protein Name Serine/threonine-protein kinase mTOR

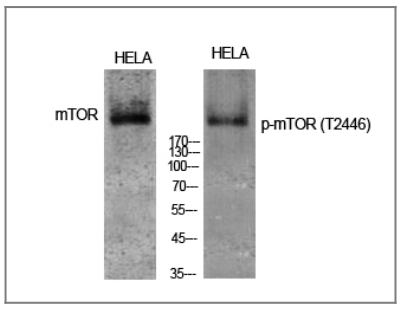
Organism	Gene ID	UniProt ID
Human	2475;	P42345;
Mouse	56717;	Q9JLN9;
Rat	56718;	P42346;

Cellular Localization Endoplasmic reticulum membrane ; Peripheral membrane protein ; Cytoplasmic side . Golgi apparatus membrane ; Peripheral membrane protein ; Cytoplasmic side . Mitochondrion outer membrane ; Peripheral membrane protein ; Cytoplasmic side . Lysosome . Cytoplasm . Nucleus , PML body . Microsome membrane . Lysosome membrane . Cytoplasmic vesicle , phagosome . Shuttles between cytoplasm and nucleus. Accumulates in the nucleus in response to hypoxia (By similarity) . Targeting to lysosomes depends on amino acid availability and RRAGA and RRAGB (PubMed:18497260 , PubMed:20381137) . Lysosome targeting also depends on interaction with MEAK7. Translocates to the lysosome membrane in the presence of TM4SF5 (PubMed:30956113) . .

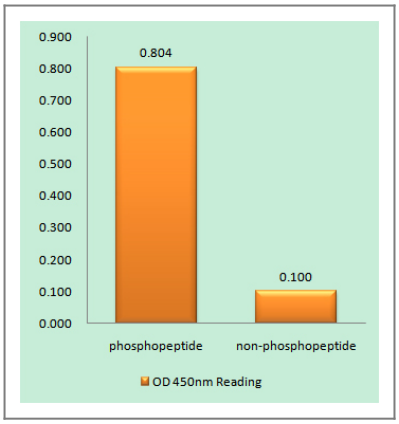
Tissue specificity Expressed in numerous tissues , with highest levels in testis.

Function Function:Acts as the target for the cell-cycle arrest and immunosuppressive effects of the FKBP12-rapamycin complex. Part of the TORC2 complex which plays a critical role in AKT1 Ser-473 phosphorylation , and may modulate the phosphorylation of PKCA and regulate actin cytoskeleton organization. ,similarity:Belongs to the PI3/PI4-kinase family. ,similarity:Contains 1 FAT domain. ,similarity:Contains 1 FATC domain. ,similarity:Contains 1 PI3K/PI4K domain. ,similarity:Contains 7 HEAT repeats. ,subunit:Interacts with the FKBP12-rapamycin complex. Binds UBQLN1. Forms part of the mammalian target of rapamycin 2 complex (TORC2) comprised of FRAP1 , GBL , PRR5 , RICTOR and SIN. TORC2 does not bind to and is not sensitive to FKBP12-rapamycin. Binds directly to PRR5 and RICTOR within the TORC2 complex. ,tissue specificity:Expressed in numerous tissues , with highest levels in testis. ,

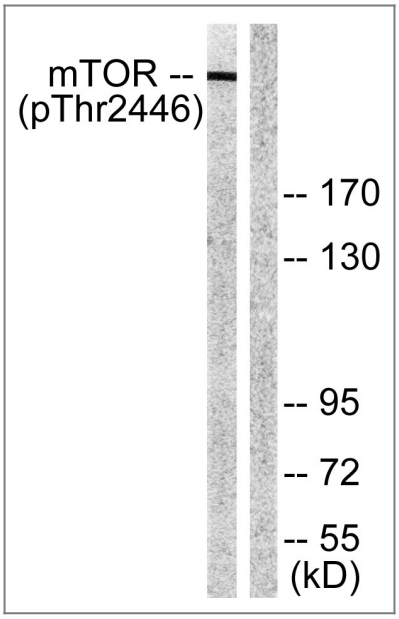
Validation Data



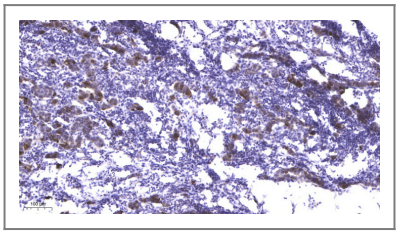
Western Blot analysis of various cells using Phospho-mTOR (T2446) Polyclonal Antibody diluted at 1:1000



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using mTOR (Phospho-Thr2446) Antibody



Western blot analysis of lysates from NIH/3T3 cells treated with Insulin 0.01U/ml 15', using mTOR (Phospho-Thr2446) Antibody. The lane on the right is blocked with the phospho peptide.



Immunohistochemical analysis of paraffin-embedded human Breast cancer. 1, Antibody was diluted at 1:200 (4℃ overnight). 2, Tris-EDTA,pH9.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200 (room temperature, 45min).

Contact information

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