Phospho-mTOR (Ser2448) Antibody

Cat.#: AF3308
Size: 100ul, 200ul
Concn.: 1mg/ml
Source: Rabbit
Mol.Wt.: 289kDa
Clonality: Polyclonal

Application: WB 1:500-1:2000 IHC 1:50-1:200
Reactivity: Mouse, Rat, Fish, Human

Purification: The antibody is from purified rabbit serum by affinity purification via sequential chromatography on phospho- and non-phospho-peptide affinity columns.

Specificity: Phospho-mTOR (Ser2448) Antibody detects endogenous levels of mTOR only when phosphorylated at Serine 2448

Immunogen: A synthesized peptide derived from human mTOR around the phosphorylation site of Serine 2448

Uniprot: P42345

Description: an atypical kinase belonging to the PIKK family of kinases. Controls cell growth through protein synthesis regulation. Downstream of PI3K/Akt pathway and required for cell survival. Acts as the target for the cell-cycle arrest and immunosuppressive effects of the FKBP12-rapamycin complex.

Subcellular Location: Cytosol; Endoplasmic reticulum; Golgi apparatus; Lysosome; Mitochondrion; Nucleus;

Tissue Specificity: Expressed in numerous tissues, with highest levels in testis.

Similarity: The kinase domain (PI3K/PI4K) is intrinsically active but has a highly restricted catalytic center. The FAT domain forms three discontinuous subdomains of alpha-helical TPR repeats plus a single subdomain of HEAT repeats. The four domains pack sequentially to form a C-shaped a-solenoid that clamps onto the kinase domain (PubMed:23636326). Belongs to the PI3/PI4-kinase family.

Storage Condition and Buffer: Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at -20 °C. Stable for 12 months from date of receipt.
Western blot analysis of mTOR phosphorylation expression in EGF treated HeLa whole cell lysates, The lane on the left is treated with the antigen-specific peptide.

Phospho-mTOR (Ser2448) Antibody for IHC in human prostate tissue

Western blot analysis of mTOR phosphorylation expression in mouse liver tissue lysates, The lane on the right is treated with the antigen-specific peptide.

AF3308 at 1/50 staining human lung cancer tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the antibody for 1.5 hours at 22°C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.

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**IMPORTANT:** For western blot, incubate membrane with diluted antibody in 5% w/v milk, 1X TBS, 0.1% Tween®20 at 4°C with gentle shaking, overnight.