**Phospho-mTOR (Ser2448) Ab**

**Cat.#:** AF3308  
**Concn.:** 1mg/ml  
**Mol.Wt.:** 250-289 kDa

**Size:** 100ul,200ul  
**Source:** Rabbit  
**Clonality:** Polyclonal

**Application:** WB 1:500-1:2000  
IHC 1:50-1:200

**Reactivity:** Human, Mouse, Rat, Fish

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

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

**Immunogen:** A synthesized peptide derived from human mTOR around the phosphorylation site of Ser2448.

**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:** Endoplasmic reticulum membrane. Golgi apparatus membrane. Mitochondrion outer membrane. Lysosome. Cytoplasm. Nucleus > PML body. 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.

**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 mouse liver tissue lysates. The lane on the right was treated with the antigen-specific peptide.

This image is a courtesy of anonymous review.

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 Ab for 1.5 hours at 22°C. An HRP conjugated goat anti-rabbit Ab was used as the secondary.

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Phospho-mTOR (Ser2448) Ab for IHC in human prostate tissue
**IMPORTANT:** For western blot, incubate membrane with diluted primary Ab in 5% w/v milk, 1X TBS, 0.1% Tween®20 at 4°C with gentle shaking, overnight.