

## Phospho-mTOR (Ser2448) Rabbit pAb

Catalog Number: bs-3494R

Target Protein: Phospho-mTOR (Ser2448)

Concentration: 1mg/ml

Form: Liquid

Host: Rabbit

Clonality: Polyclonal

Isotype: IgG

Applications: IHC-P (1:100-500), IHC-F (1:100-500), IF (1:100-500), Flow-Cyt (1µg /test)

Reactivity: Human, Mouse, Rat (predicted:Rabbit, Sheep, Cow, Dog, Horse)

Predicted MW: 289 kDa

Entrez Gene: 2475

Swiss Prot: P42345

Source: KLH conjugated Synthesised phosphopeptide derived from human mTOR around the phosphorylation site of Ser2448: TD(p-S)YS.

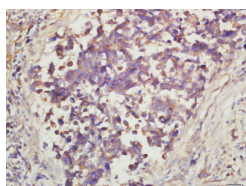
Purification: affinity purified by Protein A

Storage: 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

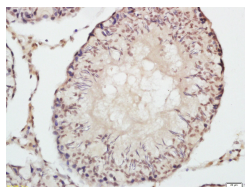
Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

**Background:** mTOR is one of a family of proteins involved in cell cycle progression, DNA recombination, and DNA damage detection. In rat, it is a 289-kDa protein (symbolized RAFT1) with significant homology to the *Saccharomyces cerevisiae* protein TOR1 and has been shown to associate with the immunophilin FKBP12 in a rapamycin dependent fashion. The FKBP12-rapamycin complex is known to inhibit progression through the G1 cell cycle stage by interfering with mitogenic signaling pathways involved in G1 progression in several cell types, as well as in yeast. The binding of FRAP to FKBP12-rapamycin correlated with the ability of these ligands to inhibit cell cycle progression.

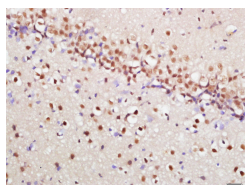
### VALIDATION IMAGES



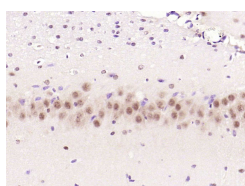
Tissue/cell: human lung carcinoma; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer ( 0.01M, pH 6.0 ), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min; Incubation: Anti-Phospho-mTOR (Ser2448) Polyclonal Antibody, Unconjugated(bs-3494R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



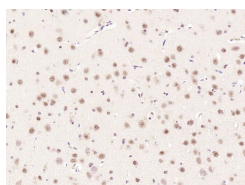
Tissue/cell: Rat testis tissue; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum, C-0005) at 37°C for 20 min; Incubation: Anti-phospho-mTOR Polyclonal Antibody, Unconjugated(bs-3494R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Tissue/cell: Rat brain tissue; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum, C-0005) at 37°C for 20 min; Incubation: Anti-phospho-mTOR Polyclonal Antibody, Unconjugated(bs-3494R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Paraformaldehyde-fixed, paraffin embedded (mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Phospho-mTOR (Ser2448)) Polyclonal Antibody, Unconjugated (bs-3494R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (rat brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Phospho-mTOR (Ser2448)) Polyclonal Antibody, Unconjugated (bs-3494R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.

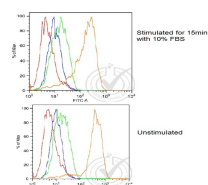


Image provided by Independent Validation (badge 029744). Histogram of serum-stimulated (positive control) and serum-starved (negative control) MCF-7 cells stained with Rabbit Anti-mTOR (Ser2448) Polyclonal Antibody (orange)(bs-3494R at 1:100), isotype control antibody (green), secondary antibody only (blue) and unstained (red). Strong signal is observed in both positive and negative controls. No change in expression is noted upon serum stimulation, as has been demonstrated in the literature. There is no evidence to support the antigen recognizing a phosphorylated version of the target.

## PRODUCT SPECIFIC PUBLICATIONS

[IF=18.2] Tingkui Zhao. et al. A Triple-Targeted Rutin-Based Self-Assembled Delivery Vector for Treating Ischemic Stroke by Vascular Normalization and Anti-Inflammation via ACE2/Ang1-7 Signaling. ACS CENTRAL SCI. 2023;XXXX(XXX):XXX-XXX FCM,IHC ; Rat,Human . 37396868

[IF=6.792] Yu Wang. et al. Environmentally relevant concentration of sulfamethoxazole-induced oxidative stress-cascaded damages in the intestine of grass carp and the therapeutic application of exogenous lycopene. Environ Pollut. 2021 Apr;274:116597 WB ; Fish . 33540255

[IF=5.919] Qi H et al. MSTN attenuates cardiac hypertrophy through inhibition of excessive cardiac autophagy by blocking AMPK/mTOR and miR-128/PPARγ/NF-κB signaling pathways. Mol Ther Nucleic Acids. 2019 Dec 14;19:507-522. WB ; Rat . 31923740

[IF=5.715] Wang Y et al. Zinc application alleviates the adverse renal effects of arsenic stress in a protein quality control way in common carp. Environ Res. 2020 Aug 17;191:110063. WB ; fish . 32818499

[IF=5.714] Zhao H et al. The cardiotoxicity of the common carp (Cyprinus carpio) exposed to environmentally relevant concentrations of arsenic and subsequently relieved by zinc supplementation. Environmental Pollution.2019 Oct; 253:741-748. WB ; Carp . doi:10.1016/j.envpol.2019.07.065