Product datasheet

anti-mTOR rabbit polyclonal, purified, serum

Short overview

Cat. No.	490947
Quantity	100 µl
Concentration	500 µg/ml

Product description

Host	Rabbit
Antibody Type	Polyclonal
Immunogen	Peptide from human mTOR (GTTVPESIHSFIGDGLVKPE)
Formulation	PBS, pH 7.4 with 0.09% sodium azide and 0.5% BSA
UniprotID	P42345 (Human)
Synomym	Mechanistic target of rapamycin, Mammalian target of rapamycin
Note	Centrifuge prior to opening
Conjugate	Unconjugated
Purification	Affinity chromatography
Storage	Up to 3 months at 2-8°C; long term storage in aliquots at -20°C; avoid freeze/thaw cycles
Intended use	Research use only
Application	ICC/IF, IHC, IP, WB
Reactivity	Dog, Human, Monkey, Mouse, Rat

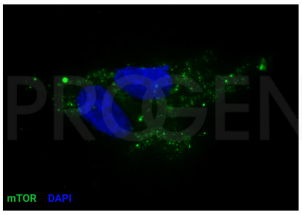
Applications

Immunocytochemistry (ICC)	1:500-1:2,000
Immunohistochemistry (IHC) - paraffin	1:50-1:100 (microwave treatment recommended)
Immunoprecipitation (IP)	10 µg
Western Blot (WB)	1:500-1:2,000

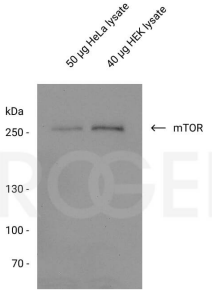
Background

Mammalian target of rapamycin (mTOR) is a serine/threonine kinase that plays a key role in protein synthesis, cell growth, proliferation and differentiation. It is inhibited by rapamycin, which has immunosuppressant functions. The 290 kDa protein is highly regulated by growth factors and nutrients like glucose and amino acids. mTOR is involved in several pathways from protein degradation via autophagy to protein synthesis via translation initiation (4EBP), ribosome and lipid synthesis. It is located in vesicles and the cytosol.

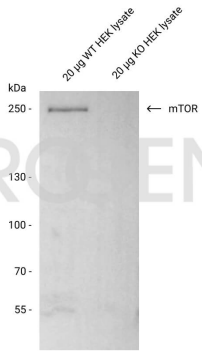
Product images



Immunocytochemistry (ICC) analysis of HeLa Cl6 cells with anti-mTOR antibody (Cat. No. 490947). HeLa cells were blocked with 5% BSA in PBST (PBS + 0.1% Tween 20) for 1 h at RT. The primary antibody anti-mTOR rabbit polyclonal was diluted in blocking buffer (antibody concentration 1 ug/ml) and incubated over-night at 4°C. The secondary antibody goat anti-rabbit Alexa Fluor 488 conjugate was also diluted in blocking buffer (antibody concentration 2.5 ug/ml) and incubated for 30 min at 37°C and 30 min at RT. DNA was stained with DAPI in blue.



Western blot analysis of HEK and HeLa lysate with anti-mTOR antibody (Cat. No. 490947). Western blot analysis was performed on 50 ug HeLa lysate and 40 ug HEK lysate. The PVDF membrane was blocked with 5% dry milk in PBST (PBS + 0.1% Tween 20) for 1.5 h at RT. The primary antibody anti-mTOR rabbit polyclonal was diluted in blocking buffer (antibody concentration 250 ng/ml) and incubated over-night at 4°C. The secondary antibody goat anti-rabbit IgG HRP (Cat. No. 90003) was also diluted in blocking buffer (antibody concentration 200 ng/ml) and incubated for 1 h at RT. The bands were visualized by chemiluminescent detection using PierceTM ECL Western Blotting Substrate.



Western blot analysis of HEK lysate with anti-mTOR antibody (Cat. No. 490947). Western blot analysis was performed on 20 ug wild type (WT) HEK lysate and 20 ug mTOR knock-out (KO) HEK lysate. The PVDF membrane was blocked with 5% dry milk in PBST (PBS + 0.1% Tween 20) for 1 h at RT. The primary antibody anti-mTOR rabbit polyclonal was diluted in blocking buffer (antibody concentration 500 ng/ml) and incubated for 1 h at RT. The secondary antibody goat anti-rabbit IgG HRP (Cat. No. 90003) was also diluted in blocking buffer (antibody concentration 200 ng/ml) and incubated for 1 h at RT. The bands were visualized by chemiluminescent detection using PierceTM ECL Western Blotting Substrate.