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Anti-mTOR/Tor Rabbit Monoclonal Antibody

Catalog Number: M00003

About MTOR

The ion channels activated by glutamate are typically divided into two classes. Those that are sensitive to N-methyl-D-aspartate (NMDA) are designated NMDA receptors (NMDAR) while those activated by alpha-amino-3-hydroxy-5-methyl-4-isoxalone propionic acid (AMPA) are known as AMPA receptors (AMPAR). The AMPAR are comprised of four distinct glutamate receptor subunits designated (GluR1-4) and they play key roles in virtually all excitatory neurotransmission in the brain (Keinänen et al., 1990; Hollmann and Heinemann, 1994). The GluR1 subunit is widely expressed throughout the nervous system. Phosphorylation of Ser-845 on GluR1 is thought to be mediated by PKA and phosphorylation of this site increases the conductance of the AMPAR (Roche et al., 1996; Banke et al., 2000). In addition, phosphorylation of this site has been linked to synaptic plasticity as well as learning and memory (Lee at al., 2003; Esteban at al., 2003).

Overview

Product Name	Anti-mTOR/Tor Rabbit Monoclonal Antibody
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-mTOR/Tor Rabbit Monoclonal Antibody catalog # M00003. Tested in WB, IHC, ICC/IF, IP, Flow Cytometry applications. This antibody reacts with Human, Mouse, Rat.
Application	Flow Cytometry, IP, IF, IHC, ICC, WB
Clonality	Monoclonal CBD-13
Formulation	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
Storage Instructions	Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.
Host	Rabbit
Uniprot ID	P42345

Technical Details

Immunogen	A synthesized peptide derived from human mTOR
Isotype	Rabbit IgG
Form	Liquid
Concentration	Actual concentration vary by lot. Use suggested dilution ratio to decide dilution procedure.
Purification	Affinity-chromatography
Suggested Dilutions	Dilute the sample so that the expected range of concentrations fall within the detection range of this

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	kit. If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples. Some PubMed article(s) citing the expression level of this target are as follows: Boster Bio's internal QC testing used: WB 1:500-1:1000 IHC 1:50-1:100 ICC/IF 1:50-1:100 IP 1:30 FC 1:20

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Anti-mTOR/Tor Rabbit Monoclonal Antibody (M00003) Images

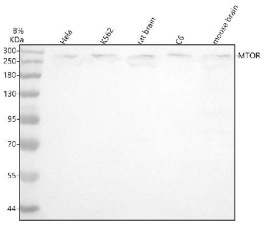
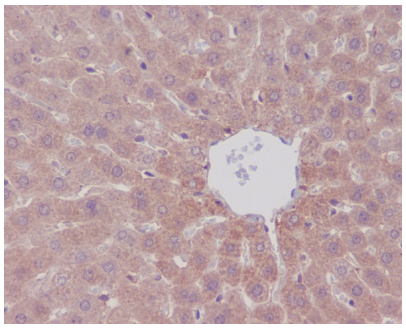


Figure 1. Western blot analysis of MTOR using anti-MTOR antibody (M00003).
Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.
Lane 1: human Hela whole cell lysates,
Lane 2: human K562 whole cell lysates,
Lane 3: rat brain tissue lysates,
Lane 4: rat C6 whole cell lysates,
Lane 5: mouse brain tissue lysates.
After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-MTOR antigen affinity purified monoclonal antibody (Catalog # M00003) at 1:500 overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:500 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for MTOR at approximately 289 kDa. The expected band size for MTOR is at 289 kDa.



Immunohistochemical analysis of paraffin-embedded rat liver, using mTOR Antibody.

4 Publications Citing This Product

1. PubMed ID: 33649809, Nie L,Liu M,Chen J,Wu Q,Li Y,Yi J,Zheng X,Zhang J,Chu C,Yang J.Hydrogen sulfide ameliorates doxorubicin□induced myocardial fibrosis in rats via the PI3K/AKT/mTOR pathway.Mol Med Rep.2021 Apr;23(4):299.doi:10.3892/mmr.2021.11938.Epub 2021 Mar 2.PMID:336498

2. PubMed ID: -, Lu Kong,Yongya Wu,Wangcheng Hu,Lin Liu,Yuying Xue,Geyu Liang,Mechanisms underlying reproductive toxicity induced by nickel nanoparticles identified by comprehensive gene expression analysis in GC-1 spg cells,Environmental Pollution,2021,116556,ISSN 0269-7

3. PubMed ID: 29904395, Rapamycin provides anti%u2011epileptogenic effect in a rat model of post%u2011traumatic epilepsy via deactivation of mTOR signaling pathway

Visit bosterbio.com/anti-mtor-rabbit-monoclonal-antibody-m00003-boster.html to see all 4 publications.

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