Mouse (monoclonal) Anti-mTOR Unconjugated

PRODUCT ANALYSIS SHEET

Catalog Number:	AHO1232
Lot Number:	See product label
Quantity/Volume:	100 µg/0.2 mL
Clone Number:	215Q18
Isotype:	IgG_{2b} κ (mouse)
Form of Antibody:	Purified immunoglobulin in phosphate buffered saline, pH 7.2, with 1% bovine serum albumin.
Preservation:	0.1% sodium azide (Caution: sodium azide is a poisonous and hazardous substance. Handle with care and dispose of properly.)
Purification:	Purified from ascites by affinity chromatography.
Immunogen:	Recombinant fragment of human mTOR expressed in *E. coli*.
Specificity:	Mammalian target of Rapamycin (mTOR), also known as FKBP12-rapamycin-associated protein (FRAP) is a ~280 kDa serine/threonine kinase and a key modulator of cell growth and protein synthesis. mTOR is implicated in cancer and neurite plasticity, and plays a central role in mediating phosphoinositide 3-kinase (PI3 kinase) and Akt/PKB signals for cell growth, proliferation, and protein translation via ribosomal S6 kinase (S6Ks) and translation regulator eIF4E-binding protein 1. mTOR is differentially phosphorylated on threonine 2446 and serine 2448 in response to nutrient status and growth factor stimulation.
Species Reactivity:	Human, mouse and rat.
Applications:	This antibody is suitable for use in Western blotting.
Suggested Working Dilutions:	For Western blotting, the recommended concentration is 1 µg/mL. The optimal antibody concentration should be determined for each specific application.
Recommended Positive Control:	Human MCF-7 cells, mouse L929 cells and rat PC12 cells.
Storage:	Store at 2-8ºC. For long term storage, aliquot into small volumes and store at –20ºC. Avoid repeated freeze-thaw cycles to prevent denaturing the antibody.

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References:

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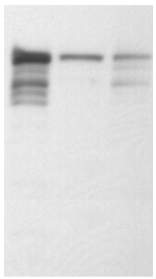
Tang, S.J., et al. (2002) A rapamycin-sensitive signaling pathway contributes to long-term synaptic plasticity in the hippocampus. Proc. Nat'l. Acad. Sci. 99(1):467-472.

Related Products:

AKT Pathway Phospho 7-Plex Antibody Bead Kit for the Luminex™ 100	Cat. # LHO0001
AKT Pathway Total 7-Plex Antibody Bead Kit for the Luminex™ 100	Cat. # LHO0002
mTOR [pS2448] Phosphorylation Site Specific Antibody	Cat. # 44-1125G
p70S6 kinase [pT229] Phosphorylation Site Specific Antibody	Cat. # 44-918G
Akt/PKB Pan Antibody	Cat. # 44-609G
Akt/PKB [pT308] Phosphorylation Site Specific Antibody	Cat. # 44-602G
Akt/PKB [pS473] Phosphorylation Site Specific Antibody	Cat. # 44-622G
PTEN [pSpTpS380/382/385] Phosphorylation Site Specific Antibody	Cat. # 44-1066G
PTEN [pS385] Phosphorylation Site Specific Antibody	Cat. # 44-1064G
RSK1 [pS221] / 2 [pS227] Phosphorylation Site Specific Antibody	Cat. # 44-924G
RSK1 [pS380] / 2 [pS386] Phosphorylation Site Specific Antibody	Cat. # 44-928G
RSK1 [pS363] / 2 [pS369] Phosphorylation Site Specific Antibody	Cat. # 44-926G
eIF-4G [pS1108] Phosphorylation Site Specific Antibody	Cat. # 44-526
RP S6 [pSpS235/236] Phosphorylation Site Specific Antibody	Cat. # 44-922G
RP S6 [pSpS244/247] Phosphorylation Site Specific Antibody	Cat. # 44-923G



~280 kDa

Western Blot Analysis

Proteins from cell extracts of human MCF7 cells (lane 1), mouse L929 cells (lane 2), and rat PC12 cells (lane 3) were resolved by SDS-PAGE and transferred to PVDF. The membranes were incubated with this mTOR monoclonal antibody (clone 215Q18) at a concentration of 1 µg/mL for two hours at room temperature. After washing, the membranes were incubated with a goat $F(ab')_2$ anti-mouse IgG alkaline phosphatase conjugated antibody (Cat. # AMI4405) at a 1:2000 dilution. Bands were detected with CDP-substrate using the WesternStar™ method (Tropix) and Kodak BioMax film.

This product is for research use only. Not for use in diagnostic procedures.

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