For Research Use Only

mTOR Monoclonal antibody, PBS Only

Catalog Number:66888-1-PBS Featured Product



Basic Information

Catalog Number:

GenBank Accession Number: NM_004958

Purification Method:

66888-1-PBS

GeneID (NCBI):

Protein A purification

1G11A3

Concentration:

CloneNo.:

1mg/ml Source:

UNIPROT ID: Full Name:

P42345

Isotype: IgG2a

Mouse

FK506 binding protein 12-rapamycin

Immunogen Catalog Number:

associated protein 1

AG28395

Calculated MW:

289 kDa

Observed MW: 250-289 kDa

Applications

Tested Applications:

WB, IHC, IF/ICC, IP, Indirect ELISA

Species Specificity:

human, mouse, rat

Background Information

MTOR, also named as FRAP1, FRAP, FRAP2 and RAPT1, belongs to the PI3/PI4-kinase family. MTOR is a Ser/Thr protein kinase that functions as an ATP and amino acid sensor to balance nutrient availability and cell growth. MTOR is kinase subunit of both mTORC1 and mTORC2, which regulate cell growth and survival in response to nutrient and hormonal signals. mTORC1 is activated in response to growth factors or amino-acids. mTORC2 is also activated by growth factors, but seems to be nutrient-insensitive. mTORC2 seems to function upstream of Rho GTPases to regulate the actin cytoskeleton, probably by activating one or more Rho-type guanine nucleotide $exchange \ factors.\ mTORC2\ promotes\ the\ serum-induced\ formation\ of\ stress-fibers\ or\ F-actin.\ MTOR\ has\ a\ calculated$ molecular mass of 289 kDa, and always can be detected at about 250 kDa due to some modifications (PMID: 14578359).

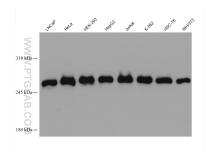
Storage

Storage:

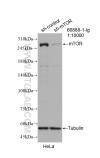
The product is shipped with ice packs. Upon receipt, store it immediately at -80°C Storage Buffer:

PBS only, pH7.3

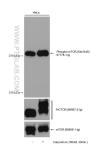
Selected Validation Data



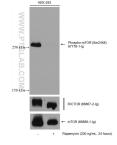
Various lysates were subjected to SDS PAGE followed by western blot with 66888-1-lg (mTOR antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 66888-1-PBS in a different storage buffer formulation.



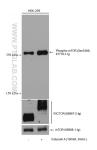
WB result of mTOR antibody (66888-1-lg; 1:10000; incubated at room temperature for 1.5 hours) with sh-Control and sh-mTOR transfected HeLa cells. This data was developed using the same antibody clone with 66888-1-PBS in a different storage buffer formulation.



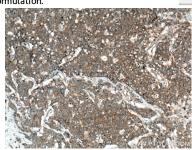
Non-treated and Calyculin A treated HeLa cells were subjected to SDS PAGE followed by western blot with 67778-1-lg (Phospho-mTOR (Ser2448) antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. The membrane was stripped and re-blotted with RICTOR antibody (66887-2-lg) and mTOR antibody (66888-1-lg) subsequently. This data was developed using the same antibody clonewith 66888-1-PBS in a different storage buffer formulation.



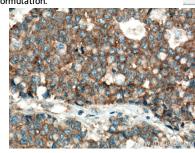
Non-treated and Rapamycin treated HEK-293 cells were subjected to SDS PAGE followed by western blot with 67778-1-lg (Phospho-mTOR (Ser2448) antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. The membrane was stripped and re-blotted with RICTOR antibody (66867-2-lg) and mTOR antibody (66888-1-lg) subsequently. This data was developed using the same antibody clone with 66888-1-PBS in a different storage buffer formulation.



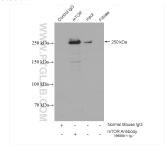
Non-treated and Calyculin A treated HEK-293 cells were subjected to SDS PAGE followed by western blot with 67778-1-lg (Phospho-mTOR (Ser2448) antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. The membrane was stripped and re-blotted with RICTOR antibody (66867-2-lg) and mTOR antibody (66888-1-lg) subsequently. This data was developed using the same antibody clonewith 66888-1-PBS in a different storage buffer formulation.



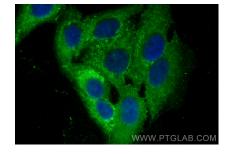
Immunohistochemical analysis of paraffinembedded human colon cancer tissue slide using 66888-1-lg (MTOR antibody) at dilution of 1:2500 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66888-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffinembedded human colon cancer tissue slide using 66888-1-lg (MTOR antibody) at dilution of 1:2500 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66888-1-PBS in a different storage buffer formulation.



IP result of anti-mTOR (IP:66888-1-Ig, 5ug; Detection:66888-1-Ig 1:20000) with HeLa cells lysate 1600 ug. This data was developed using the same antibody clone with 66888-1-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using mTOR antibody (66888-1-lg, Clone: 1G11A3) at dilution of 1:800 and CoraLite®488-Conjugated Goat Anti-Mouse lgG(H+L) (SA00013-1). This data was developed using the same antibody clone with 66888-1-PBS in a different storage buffer formulation.