For Research Use Only

Raptor Polyclonal antibody

Catalog Number:20984-1-AP Featured Product 48 Publications

proteintech®
Antibodies | ELISA kits | Proteins
www.ptglab.com

Basic Information

Catalog Number:
20984-1-AP

Concentration:
600 ug/ml

Source:
Rabbit

Isotype:
IgG

GenBank Accession Number:
NM_020761

GeneID (NCBI):
57521

UNIPROT ID:
Q8N122

Full Name:
raptor

Calculated MW:
149 kDa

Observed MW:
130-150 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
WB 1:2000-1:12000
IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate
IF/ICC 1:50-1:500

Applications

Tested Applications:
WB, IF/ICC, IP, ELISA

Cited Applications:
WB, IHC, IF, IP, PLA

Species Specificity:
human, mouse

Cited Species:
human, mouse, rat, rabbit

Positive Controls:

WB : HEK-293 cells, HepG2 cells, HeLa cells, mouse liver tissue

IP : HEK-293 cells,

IF/ICC : U2OS cells,

Background Information

RPTOR, also named as KIAA1303 and RAPTOR Belongs to the WD repeat RAPTOR family. It is involved in the control of the mammalian target of rapamycin complex 1 (mTORC1) activity which regulates cell growth and survival, and autophagy in response to nutrient and hormonal signals; functions as a scaffold for recruiting mTORC1 substrates. mTORC1 is activated in response to growth factors or amino-acids. Amino-acid-signaling to mTORC1 is mediated by Rag GTPases, which cause amino-acid-induced relocalization of mTOR within the endomembrane system. Activated mTORC1 up-regulates protein synthesis by phosphorylating key regulators of mRNA translation and ribosome synthesis. mTORC1 phosphorylates EIF4EBP1 and releases it from inhibiting the elongation initiation factor 4E (eiF4E). mTORC1 phosphorylates and activates S6K1 at 'Thr-389', which then promotes protein synthesis by phosphorylating PDCD4 and targeting it for degradation. The antibody is specific to RPTOR.

Notable Publications

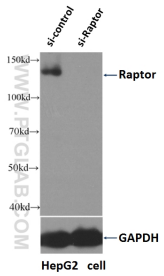
Author	Pubmed ID	Journal	Application
Shun-Yuan Li	31545482	Int J Mol Med	WB
Peter Gollwitzer	36097072	Nat Cell Biol	WB
Ziru Li	25157160	Proc Natl Acad Sci U S A	WB, IP

Storage

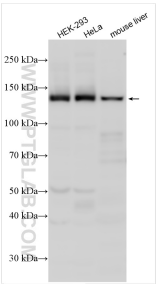
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

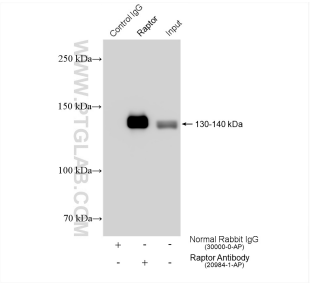
Selected Validation Data



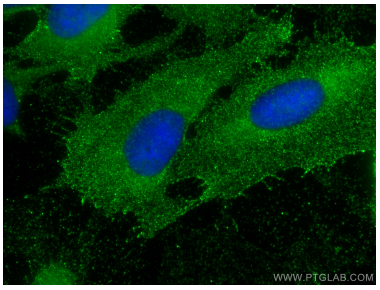
WB result of Raptor antibody (20984-1-AP, 1:500) with si-control and si-Raptor transfected HepG2 cells.



Various lysates were subjected to SDS PAGE followed by western blot with 20984-1-AP (Raptor antibody) at dilution of 1:6000 incubated at room temperature for 1.5 hours.



IP result of anti-Raptor (IP:20984-1-AP, 4ug; Detection:20984-1-AP 1:4000) with HEK-293 cells lysate 1400 ug.



Immunofluorescent analysis of (-20°C Methanol) fixed U2OS cells using Raptor antibody (20984-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).