

DEPTOR Antibody
Catalog # ASC11797**Specification****DEPTOR Antibody - Product Information**

Application	WB, IHC-P, E
Primary Accession	Q8TB45
Other Accession	NP_073620 , 189571664
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	Predicted: 45 kDa

Application Notes	Observed: 42 kDa KDa DEPTOR antibody can be used for detection of DEPTOR by Western blot at 1 - 2 µg/ml. Antibody can also be used for Immunohistochemistry at 5 µg/mL.
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DEPTOR Antibody - Additional Information

Gene ID **64798**

Target/Specificity

DEPTOR; DEPTOR antibody is human, mouse and rat reactive. At least three isoforms of DEPTOR are known to exist; this antibody will detect all three isoforms.

Reconstitution & Storage

DEPTOR antibody can be stored at 4°C for three months and -20°C, stable for up to one year.

Precautions

DEPTOR Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

DEPTOR Antibody - Protein Information

Name DEPTOR {ECO:0000303|PubMed:19446321, ECO:0000312|HGNC:HGNC:22953}

Function

Negative regulator of the mTORC1 and mTORC2 complexes: inhibits the protein kinase activity of MTOR, thereby inactivating both complexes (PubMed:19446321, PubMed:22017875, PubMed:22017876, PubMed:22017877, PubMed:25936805, PubMed:29382726, PubMed:34519268, PubMed:34519269). DEPTOR

inhibits mTORC1 and mTORC2 to induce autophagy (PubMed:22017875, PubMed:22017876, PubMed:22017877). In contrast to AKT1S1/PRAS40, only partially inhibits mTORC1 activity (PubMed:34519268, PubMed:34519269).

Cellular Location

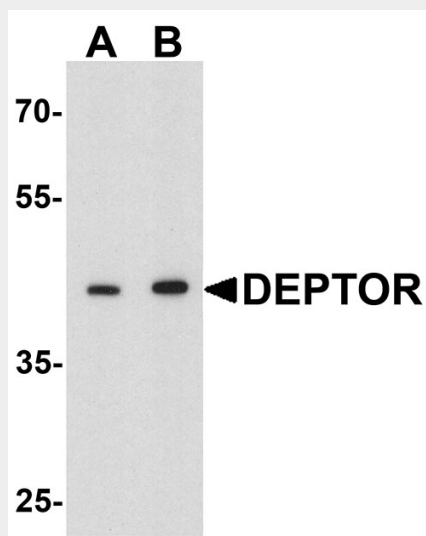
Lysosome membrane. Note=Localizes to the lysosomal membrane when associated with the mTORC1 and mTORC2 complexes.

DEPTOR Antibody - Protocols

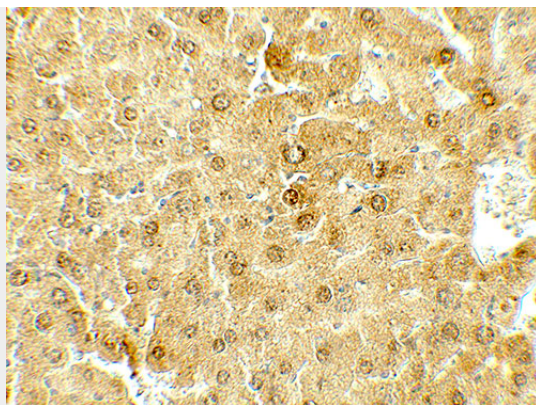
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

DEPTOR Antibody - Images



Western blot analysis of DEPTOR in mouse liver tissue lysate with DEPTOR antibody at (A) 1 and (B) 2 µg/ml.



Immunohistochemistry of DEPTOR in mouse liver tissue with DEPTOR antibody at 5 µg/mL.

DEPTOR Antibody - Background

DEPTOR is an mTOR (mammalian target of rapamycin)-interacting protein whose expression is negatively regulated by mTOR complex 1 (mTORC1) and mTORC2 (1). Loss of DEPTOR activates RP6SK1, Akt1, and SGK1, promotes cell growth and survival, and activates mTORC1 and mTORC2 kinase activities. DEPTOR expression is low in most cancers, but is often elevated in multiple myelomas (1). In response to stimulation by mitogens, DEPTOR is rapidly phosphorylated leading to its ubiquitination and degradation, allowing mTOR to generate an auto-amplification loop to promote its own full activation (2).

DEPTOR Antibody - References

Peterson TR, Laplante M, Thoreen CC, et al. DEPTOR is an mTOR inhibitor frequently overexpressed in multiple myeloma cells and required for survival. *Cell* 2009; 137:873-6.

Duan S, Skaar JR, Kuchay S, et al. mTOR generates an auto-amplification loop by triggering the bTrCP- and CK1a-dependent degradation of DEPTOR. *Mol. Cell* 2011; 44:317-24.