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Datasheet for 600-401-DW5

Raptor Antibody

Overview

Description:	Anti-Raptor (RABBIT) Antibody - 600-401-DW5
Item No.:	600-401-DW5
Size:	100 µg
Applications:	ELISA, IF, IHC, WB
Reactivity:	Human, Mouse
Host Species:	Rabbit

Product Details

Background:	The mammalian Target of Rapamycin (TOR, also known as mTOR) is an evolutionarily conserved serine/threonine kinase that regulates cell growth and cell cycle through its ability to integrate signals from nutrient levels and growth factors. Rapamycin inhibits TOR activity resulting in reduced cell growth and reduced rates of cell cycle and cell proliferation. Raptor (regulatory associated protein of TOR) is a TOR-binding protein essential for TOR signaling in vivo. It acts as a TOR scaffold protein whose binding by TOR substrates is necessary for effective TOR-catalyzed phosphorylation. These substrates include the ribosomal protein S6 kinase (RP S6K) and the eukaryotic initiation factor 4E binding protein 4EBP1, proteins necessary for cell growth and proliferation and responsive to nutrient and mitogen levels. Raptor binds these proteins through a common 5 amino acid TOR-signaling (TOS) motif; mutation of this motif prevents the TOR-dependent phosphorylation of these proteins.
Synonyms:	Raptor Antibody, Rap, Raptor, mKIAA1303, 4932417H02Rik, Regulatory-associated protein of mTOR
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	Rptor
Reactivity:	Human, Mouse

Immunogen Type:	Conjugated Peptide
Immunogen:	Anti-Raptor polyclonal antibody was prepared from whole rabbit serum produced by repeated immunizations with a 13 amino acid synthetic peptide from near the amino-terminus of human Raptor.
Purity/Specificity:	Anti-Raptor Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. Raptor has multiple isoforms that may also be recognized by antibody.
Relevant Links:	• UniProtKB - Q8K4Q0 • GeneID - 74370 • NCBI - Q8K4Q0

Application Details

Tested Applications:	ELISA, IF, IHC, WB
Application Note:	Anti-Raptor Antibody has been tested for use in ELISA, Western Blotting, Immunocytochemistry and Immunofluorescence. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 149 kDa in Western Blots of specific cell lysates and tissues.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:20,000 - 1:40,000
IF:	10 µg/mL
WB:	2 and 4 µg/mL

Formulation

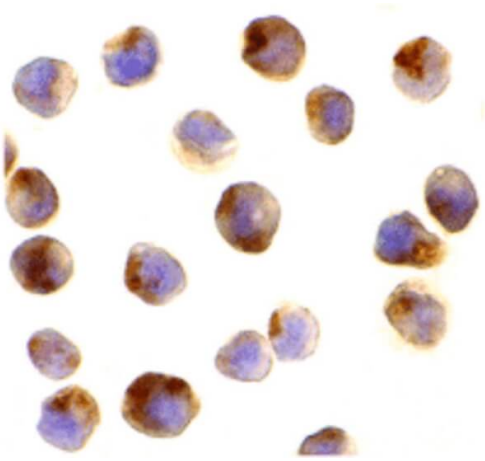
Physical State:	Liquid (sterile filtered)
Concentration:	1 mg/mL by UV absorbance at 280 nm
Buffer:	0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

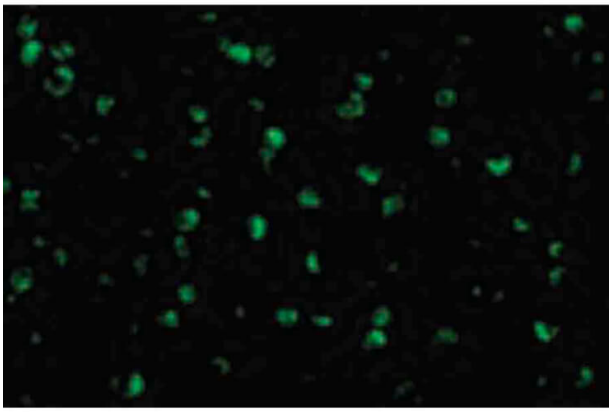
Shipping Condition:	Dry Ice

Storage Condition:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

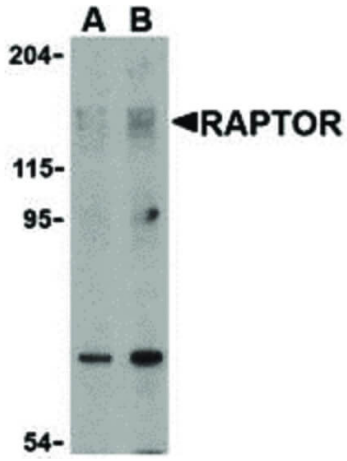
Images



Immunohistochemistry
Immunocytochemistry of Raptor antibody. Cell Type: L1210 cells. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: Raptor antibody at 10 µg/mL for 1 h at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: Raptor is cytoplasmic and lysosomic. Staining: Raptor is stained brown with hematoxylin purple counterstain.



Immunofluorescence Microscopy
Immunofluorescence Microscopy of Raptor antibody. Cell Type: L1210 cells. Fixation: 0.5% PFA. Antigen retrieval: not required. Primary antibody: Raptor antibody at 10 µg/mL for 1 h at RT. Secondary antibody: Fluorescein rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: Raptor is cytoplasmic and lysosomic. Staining: Raptor as green fluorescent signal.



Western Blot

Western Blot of Raptor antibody. Lane A: L1210 cell lysate with Anti-Raptor at 2 µg/mL. Lane B: L1210 cell lysate with Anti-Raptor at 4 µg/mL. Load: 35 µg per lane. Primary antibody: Raptor antibody at designated concentrations for overnight at 4°C. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 149 kDa, 123 kDa for Raptor. Other band(s): Raptor splice variants and isoforms.

Disclaimer

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