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Datasheet for 600-401-EC0

RPS6K1 Antibody

Overview

Description:	Anti-RPS6K1 (RABBIT) Antibody - 600-401-EC0
Item No.:	600-401-EC0
Size:	100 µg
Applications:	ELISA, IF, IHC, WB
Reactivity:	Human
Host Species:	Rabbit

Product Details

Background:	Ribosomal protein S6 kinase 1 (RPS6K1) is the best characterized effector of the mammalian Target of Rapamycin (TOR), 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. Nutrients and growth factors stimulate a complex including TOR, raptor (regulatory associated protein of TOR), and GbetaL to phosphorylate RPS6K1 and the eukaryotic initiation factor 4E binding protein (4EBP1), leading to increased protein synthesis and cell growth. RPS6K1 is thought to desensitize tissues to insulin as mice deficient in RPS6K1 have been shown to be hypersensitive to insulin and impervious to obesity-induced insulin resistance seen in wild type obese mice.
Synonyms:	RPS6K1 Antibody, RSK, HU-1, RSK1, MAPKAPK1A, Ribosomal protein S6 kinase alpha-1, 90 kDa ribosomal protein S6 kinase 1, S6K-alpha-1
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	RPS6KA1
Reactivity:	Human
Immunogen Type:	Conjugated Peptide

Immunogen:	Anti-RPS6K1 antibody was prepared from whole rabbit serum produced by repeated immunizations with a 16 amino acid synthetic peptide from near the C-terminus of human RPS6K1.
Purity/Specificity:	Anti-RPS6K1 Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. Cross reactivity with RPS6K1 from other sources has not been determined.
Relevant Links:	• UniProtKB - Q15418 • GeneID - 6195 • NCBI - AAC82497

Application Details

Tested Applications:	ELISA, IF, IHC, WB
Application Note:	Anti-RPS6K1 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 83 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:	1:25,000 - 1:100,000
IF:	20 µg/mL
WB:	2.5-10 µg/mL

Formulation

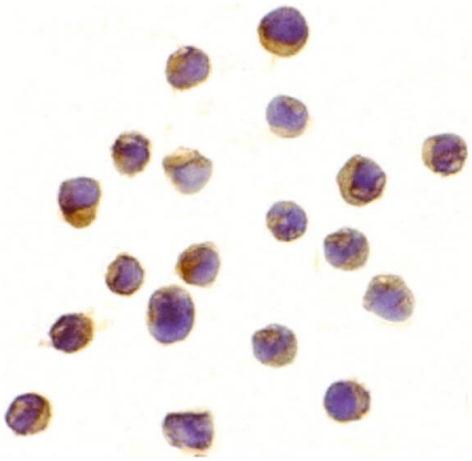
Physical State:	Liquid (sterile filtered)
Concentration:	1 mg/mL by UV absorbance at 280 nm
Buffer:	0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

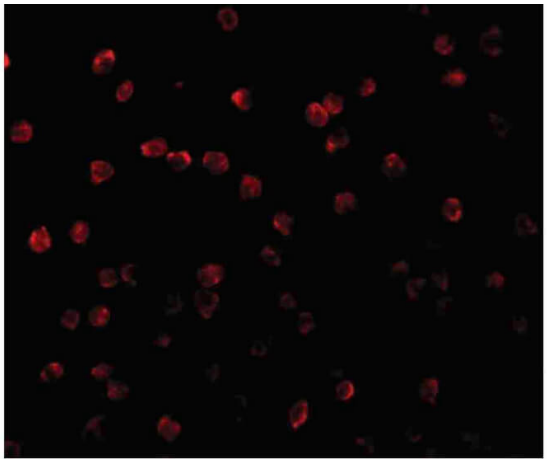
Shipping Condition:	Dry Ice

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.

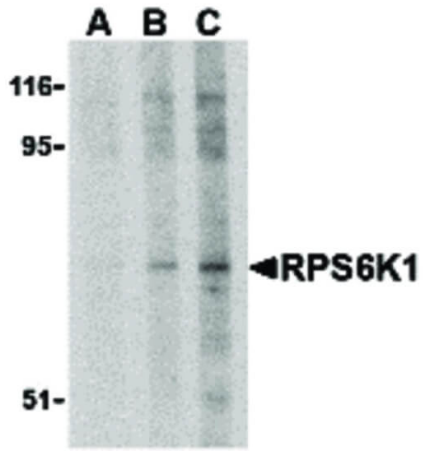
Images



Immunohistochemistry
Immunocytochemistry of RPS6K1 antibody. Cell Type: Jurkat cells. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: RPS6K1 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: RPS6K1 is nuclear and cytoplasmic. Staining: RPS6K1 is stained with hematoxylin purple nuclear counterstain.



Immunofluorescence Microscopy
Immunofluorescence Microscopy of RP S6 Kinase antibody. Cell Type: Jurkat cells. Fixation: 0.5% PFA. Antigen retrieval: not required. Primary antibody: RP S6 Kinase antibody at 20 µg/mL for 1 h at RT. Secondary antibody: Fluorescein rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: RP S6 Kinase is nuclear and cytoplasmic. Staining: RP S6 Kinase as red fluorescent signal.



Western Blot

Western Blot of RPS6K1 antibody in Jurkat cell lysate. Lane A: RPS6K1 antibody at 2.5 µg/mL. Lane B: RPS6K1 antibody at 5 µg/mL. Lane C: RPS6K1 antibody at 10 µg/mL. Load: 35 µg per lane. Primary antibody: RPS6K1 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: 82 kDa, 72 kDa for RPS6K1. Other band(s): RPS6K1 splice variants and isoforms.

Disclaimer

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