

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

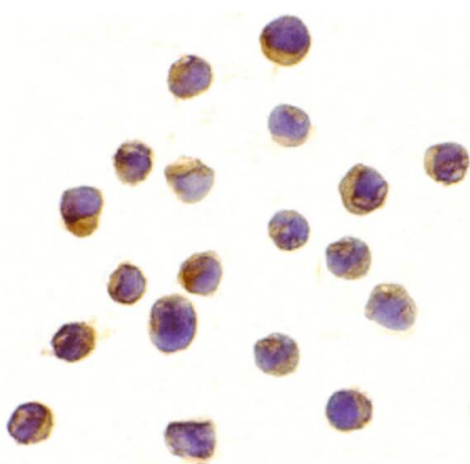
Shipping & Handling

Shipping Condition:	Dry Ice
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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.

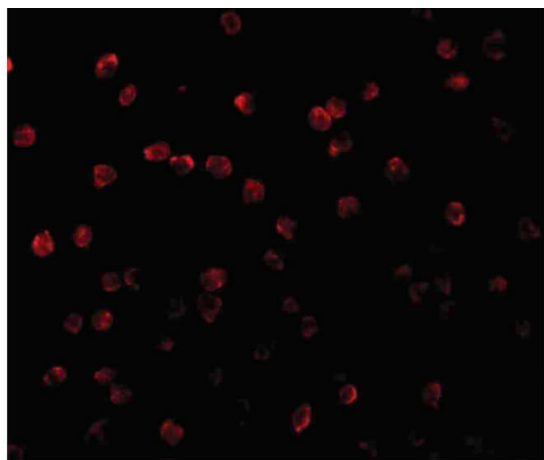
Expiration: Expiration date is one (1) year from date of receipt.

Images



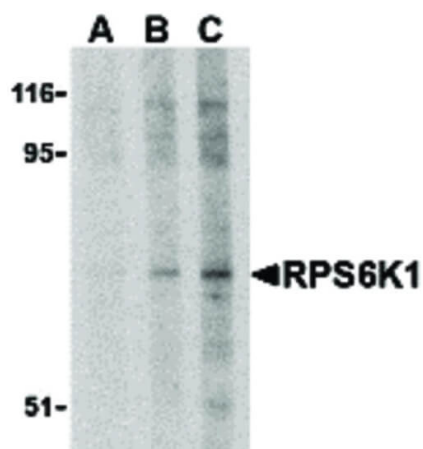
Immunohistochemistry

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

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.