



Rabbit Anti-RPS6KA1 antibody

SL10365R

Product Name:	RPS6KA1
Chinese Name:	丝氨酸/苏氨酸激酶p90RSK蛋白抗体
Alias:	RSK1 p90; 90 kDa ribosomal protein S6 kinase 1; dJ590P13.1 (ribosomal protein p90RSK; RSK1 p90; S6 kinase, 90kD, polypeptide 1; dJ590P13.1; EC 2.7.11.1; HU 1; HU1; KS6A1_HUMAN; MAP kinase activated protein kinase 1a; MAP kinase-activated protein kinase 1a; MAPK-activated protein kinase 1a; MAPKAP kinase 1A; MAPKAPK-1a; MAPKAPK1A; MGC79981; Mitogen-activated protein kinase-activated protein kinase 1A; OTTHUMP00000004113; p90 RSK1; p90-RSK 1; p90rsk; p90RSK1; p90S6K; pp90RSK1; Ribosomal protein S6 kinase 90kD 1; Ribosomal protein S6 kinase 90kD polypeptide 1; Ribosomal protein S6 kinase 90kDa polypeptide 1; Ribosomal protein S6 kinase alpha 1; Ribosomal protein S6 kinase alpha-1; Ribosomal protein S6 kinase polypeptide 1; Ribosomal S6 kinase 1; RPS6K1 alpha; rps6ka; Rps6ka1; RSK 1; RSK 1 p90; RSK; RSK-1; RSK1; S6K alpha 1; S6K-alpha-1.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Pig,Cow,Horse,Rabbit,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	81kDa
Cellular localization:	The nucleuscytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human RPS6KA1:51-150/735
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year

	when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	<p>Rsk1 is a member of a family of 90kDa ribosomal protein S6 kinases, which includes Rsk1, Rsk2 and Rsk3. These are broadly expressed serine/threonine protein kinases activated in response to mitogenic stimuli, including extracellular signal regulated protein kinases Erk1 and Erk2. Rsk1 is activated by MAPK in vitro and in vivo via phosphorylation. Active Rsks appear to play a major role in transcriptional regulation by translocating to the nucleus and phosphorylating c Fos and CREB.</p> <p>Function: Serine/threonine-protein kinase that acts downstream of ERK (MAPK1/ERK2 and MAPK3/ERK1) signaling and mediates mitogenic and stress-induced activation of the transcription factors CREB1, ETV1/ER81 and NR4A1/NUR77, regulates translation through RPS6 and EIF4B phosphorylation, and mediates cellular proliferation, survival, and differentiation by modulating mTOR signaling and repressing pro-apoptotic function of BAD and DAPK1. In fibroblast, is required for EGF-stimulated phosphorylation of CREB1, which results in the subsequent transcriptional activation of several immediate-early genes. In response to mitogenic stimulation (EGF and PMA), phosphorylates and activates NR4A1/NUR77 and ETV1/ER81 transcription factors and the cofactor CREBBP. Upon insulin-derived signal, acts indirectly on the transcription regulation of several genes by phosphorylating GSK3B at 'Ser-9' and inhibiting its activity. Phosphorylates RPS6 in response to serum or EGF via an mTOR-independent mechanism and promotes translation initiation by facilitating assembly of the preinitiation complex. In response to insulin, phosphorylates EIF4B, enhancing EIF4B affinity for the EIF3 complex and stimulating cap-dependent translation. Is involved in the mTOR nutrient-sensing pathway by directly phosphorylating TSC2 at 'Ser-1798', which potently inhibits TSC2 ability to suppress mTOR signaling, and mediates phosphorylation of RPTOR, which regulates mTORC1 activity and may promote rapamycin-sensitive signaling independently of the PI3K/AKT pathway. Mediates cell survival by phosphorylating the pro-apoptotic proteins BAD and DAPK1 and suppressing their pro-apoptotic function. Promotes the survival of hepatic stellate cells by phosphorylating CEBPB in response to the hepatotoxin carbon tetrachloride (CCl4). Is involved in cell cycle regulation by phosphorylating the CDK inhibitor CDKN1B, which promotes CDKN1B association with 14-3-3 proteins and prevents its translocation to the nucleus and inhibition of G1 progression.</p> <p>Subunit: Forms a complex with either MAPK1/ERK2 or MAPK3/ERK1 in quiescent cells. Transiently dissociates following mitogenic stimulation. Interacts with ETV1/ER81 and FGFR1.</p> <p>Subcellular Location: Nucleus. Cytoplasm.</p> <p>Post-translational modifications:</p>

Activated by phosphorylation at Ser-221 by PDPK1. Autophosphorylated on Ser-380, as part of the activation process. May be phosphorylated at Thr-359 and Ser-363 by MAPK1/ERK2 and MAPK3/ERK1.

N-terminal myristoylation results in an activated kinase in the absence of added growth factors.

Similarity:

Belongs to the protein kinase superfamily. AGC Ser/Thr protein kinase family. S6 kinase subfamily.

Contains 1 AGC-kinase C-terminal domain.

Contains 2 protein kinase domains.

SWISS:

Q15418

Gene ID:

6195

Database links:

[Entrez Gene: 6195](#) Human

[Entrez Gene: 20111](#) Mouse

[Entrez Gene: 81771](#) Rat

[Omim: 601684](#) Human

[SwissProt: Q15418](#) Human

[SwissProt: P18653](#) Mouse

[SwissProt: Q63531](#) Rat

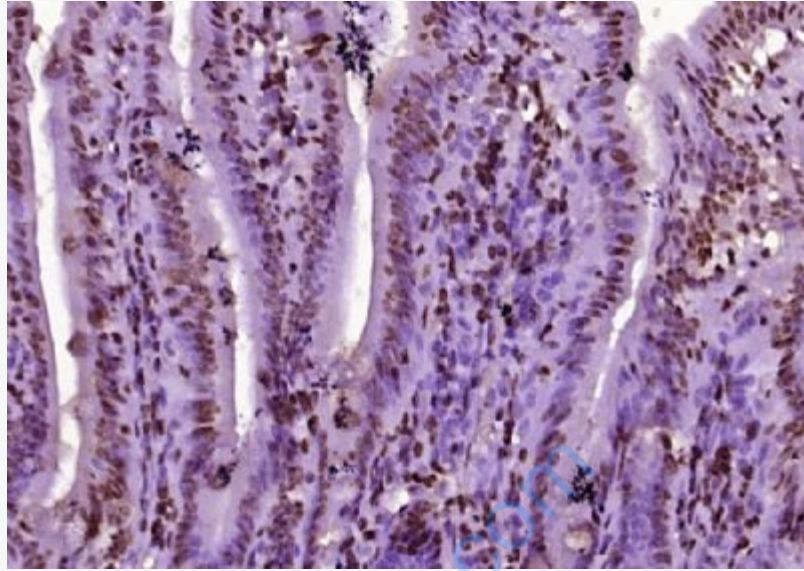
[Unigene: 149957](#) Human

[Unigene: 301827](#) Mouse

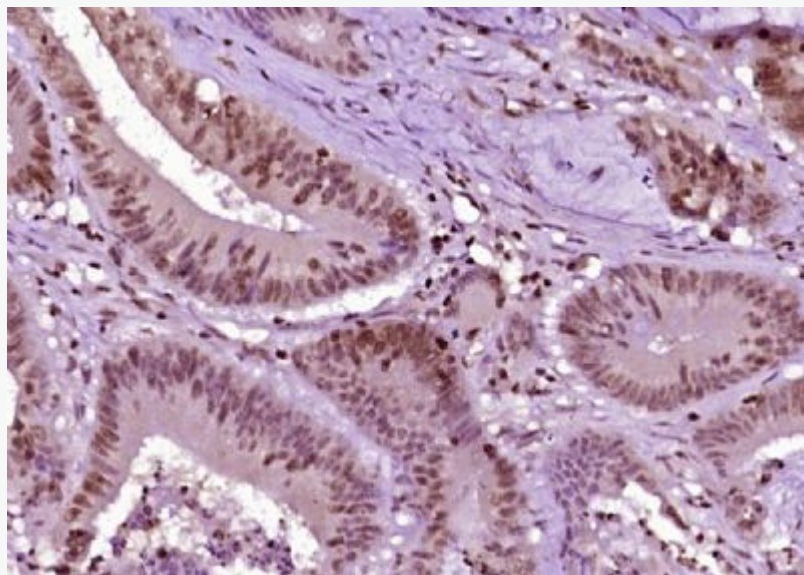
[Unigene: 34915](#) Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.



Paraformaldehyde-fixed, paraffin embedded (mouse intestine tissue); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (RPS6KA1) Polyclonal Antibody, Unconjugated (SL10365R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Picture:

Paraformaldehyde-fixed, paraffin embedded (human colon carcinoma); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (RPS6KA1) Polyclonal Antibody, Unconjugated (SL10365R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.

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