

Datasheet for ABIN745283
anti-RPS6KA3 antibody (pTyr529)



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2 Images

Overview

Quantity:	100 µL
Target:	RPS6KA3
Binding Specificity:	pTyr529
Reactivity:	Human, Mouse
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This RPS6KA3 antibody is un-conjugated
Application:	ELISA, Immunofluorescence (Paraffin-embedded Sections) (IF (p)), Immunofluorescence (Cultured Cells) (IF (cc)), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), Immunohistochemistry (Frozen Sections) (IHC (fro))

Product Details

Immunogen:	KLH conjugated synthetic phosphopeptide derived from human RSK2 around the phosphorylation site of Tyr529
Isotype:	IgG
Specificity:	This phosphorylation site is homologous in the listed cross reactive species at the specified location.
Cross-Reactivity:	Human, Mouse
Predicted Reactivity:	Rat,Dog,Cow,Pig,Horse,Chicken,Rabbit
Purification:	Purified by Protein A.

Target Details

Target:	RPS6KA3
Alternative Name:	RSK2 (RPS6KA3 Products)
Background:	<p>Synonyms: CLS, RSK, HU-3, RSK2, MRX19, ISPK-1, p90-RSK2, pp90RSK2, MAPKAPK1B, S6K-alpha3, Ribosomal protein S6 kinase alpha-3, S6K-alpha-3, 90 kDa ribosomal protein S6 kinase 3, p90-RSK 3, p90RSK3, Insulin-stimulated protein kinase 1, MAP kinase-activated protein kinase 1b, MAPK-activated protein kinase 1b, MAPKAP kinase 1b, MAPKAPK-1b, Ribosomal S6 kinase 2, RSK-2, RPS6KA3, ISPK1</p> <p>Background: 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 and histone H3 at 'Ser-10', 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).</p>
Gene ID:	6197
UniProt:	P51812
Pathways:	MAPK Signaling , Neurotrophin Signaling Pathway , Activation of Innate immune Response , Toll-Like Receptors Cascades

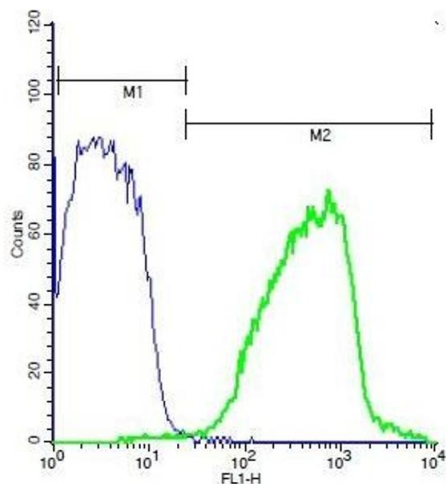
Application Details

Application Notes:	ELISA 1:500-1000 IHC-P 1:200-400 IHC-F 1:100-500 IF(IHC-P) 1:50-200 IF(IHC-F) 1:50-200 IF(ICC) 1:50-200
Restrictions:	For Research Use only

Handling

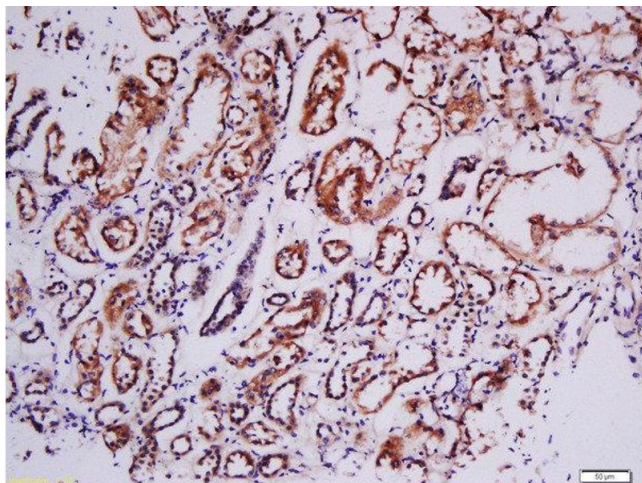
Format:	Liquid
Concentration:	1 µg/µL
Buffer:	0.01M TBS(pH 7.4) with 1 % BSA, 0.02 % Proclin300 and 50 % Glycerol.
Preservative:	ProClin
Precaution of Use:	This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE, which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.
Expiry Date:	12 months

Images



Flow Cytometry

Image 1. Mouse brain probed with Rabbit Anti-RSK2 (Tyr529) Polyclonal Antibody, Unconjugated (ABIN745283) (green) at 1:100 for 40 minutes followed by a FITC conjugated secondary compared to control cells (blue).



Immunohistochemistry (Paraffin-embedded Sections)

Image 2. Formalin-fixed and paraffin embedded human kidney labeled with Rabbit Anti-RSK2(Tyr529) Polyclonal Antibody, Unconjugated (ABIN745283) at 1:200 followed by conjugation to the secondary antibody and DAB staining