

## Datasheet for ABIN7127744

# Recombinant anti-RPS6KA1 antibody (pSer363, pThr359)





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Quantity:	100 μL	
Target:	RPS6KA1	
Binding Specificity:	pSer363, pThr359	
Reactivity:	Human	
Host:	Rabbit	
Antibody Type:	Recombinant Antibody	
Clonality:	Monoclonal	
Conjugate:	This RPS6KA1 antibody is un-conjugated	
Application:	Western Blotting (WB), ELISA, Immunoprecipitation (IP), Immunofluorescence (IF)	
Product Details		
Immunogen:	A synthesized peptide derived from human Phospho-RPS6KA1 (T359+S363)	
Clone:	1B6	
Isotype:	IgG	
Cross-Reactivity:	Human	
Purification:	Affinity-chromatography	
Target Details		
Target:	RPS6KA1	
Alternative Name:	RPS6KA1 (RPS6KA1 Products)	
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Background:

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, 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 mTORindependent 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 nutrientsensing 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 (CCI4). Mediates induction of hepatocyte prolifration by TGFA through phosphorylation of CEBPB (By similarity). 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. Phosphorylates EPHA2 at 'Ser-897', the RPS6KA-EPHA2 signaling pathway controls cell migration (PubMed:26158630). Aliases: Ribosomal protein S6 kinase alpha-1, S6K-alpha-1, 90 kDa ribosomal protein S6 kinase 1, p90-RSK 1, p90RSK1, p90S6K, MAP kinase-activated protein kinase 1a, MAPK-activated protein kinase 1a, MAPKAP kinase 1a, MAPKAPK-1a, Ribosomal S6 kinase 1, RSK-1, RPS6KA1, MAPKAPK1A, RSK1

UniProt:

Q15418

Pathways:

MAPK Signaling, Neurotrophin Signaling Pathway, Activation of Innate immune Response, Toll-Like Receptors Cascades

#### **Application Details**

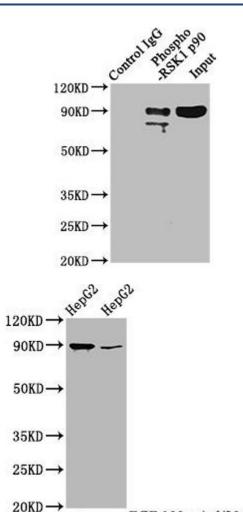
Application Notes:

Recommended dilution: WB:1:500-1:5000, IF:1:20-1:200, IP:1:200-1:1000,

Restrictions:	For Research Use only

Handling	
Format:	Liquid
Buffer:	Rabbit IgG in phosphate buffered saline , pH 7.4, 150 mM NaCl, 0.02 % sodium azide and 50 % glycerol.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C,-80 °C
Storage Comment:	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.

### **Images**



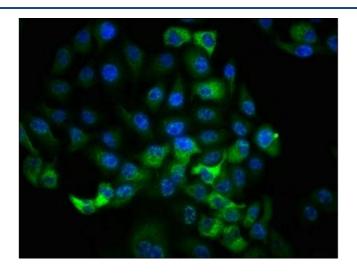
EGF 100ng/ml/20min

#### **Western Blotting**

Image 1. Immunoprecipitating Phospho-RPS6KA1 in Hela whole cell lysate Lane 1: Rabbit control IgG(1 μg)instead of ABIN7127744 in Hela whole cell lysate. For western blotting,a HRP-conjugated Protein G antibody was used as the secondary antibody (1/2000) Lane 2: ABIN7127744(3 µ g)+ Hela whole cell lysate(1 mg) Lane 3: Hela whole cell lysate (20 µg)

#### **Western Blotting**

Image 2. Western Blot Positive WB detected in HepG2 whole cell lysate(treated with EGF or not) All lanes Phospho-RPS6KA1 antibody at 0.69 µg/mL Secondary Goat polyclonal to rabbit IgG at 1/50000 dilution Predicted band size: 90 KDa Observed band size: 90 KDa



#### Immunofluorescence

**Image 3.** Immunofluorescence staining of Hela cells with ABIN7127744 at 1:100,counter-stained with DAPI. The cells were fixed in 4% formaldehyde, permeabilized using 0.2% Triton X-100 and blocked in 10% normal Goat Serum. The cells were then incubated with the antibody overnight at 4°C. The secondary antibody was Alexa Fluor 488-congugated AffiniPure Goat Anti-Rabbit IgG (H+L).