

## ARG58269 anti-p90 RSK phospho (Thr359) antibody

Package: 50 μl Store at: -20°C

# Summary

Product Description	Rabbit Polyclonal antibody recognizes p90 RSK phospho (Thr359)
Tested Reactivity	Hu, Rat
Tested Application	IP, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	p90 RSK
Species	Human
Immunogen	Phospho specific peptide corresponding to residues surrounding Thr359 of Human p90 RSK
Conjugation	Un-conjugated
Alternate Names	p90-RSK 1; Ribosomal S6 kinase 1; MAPKAPK-1a; RSK; p90RSK1; MAPKAPK1A; HU-1; p90S6K; MAPK- activated protein kinase 1a; S6K-alpha-1; MAPKAP kinase 1a; p90Rsk; RSK-1; EC 2.7.11.1; Ribosomal protein S6 kinase alpha-1; RSK1; MAP kinase-activated protein kinase 1a; 90 kDa ribosomal protein S6 kinase 1

## **Application Instructions**

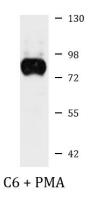
Application table	Application	Dilution
	IP	Assay-dependent
	WB	1:500 - 1:2000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	C6 + PMA	
Observed Size	90 kDa	

## Properties

Form	Liquid
Purification	Affinity purified.
Buffer	PBS (pH 7.3), 0.02% Sodium azide and 50% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

#### Bioinformation

Gene Symbol	RPS6KA1
Gene Full Name	ribosomal protein S6 kinase, 90kDa, polypeptide 1
Background	This gene encodes a member of the RSK (ribosomal S6 kinase) family of serine/threonine kinases. This kinase contains 2 nonidentical kinase catalytic domains and phosphorylates various substrates, including members of the mitogen-activated kinase (MAPK) signalling pathway. The activity of this protein has been implicated in controlling cell growth and differentiation. Alternate transcriptional splice variants, encoding different isoforms, have been characterized. [provided by RefSeq, Jul 2008]
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 insulinderived 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 pre-initiation 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 DSFA through phosphorylation of CEBPB (By similarity). Is involved in cell cycle regulation 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
Calculated Mw	83 kDa
PTM	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. [UniProt]
Cellular Localization	Cytoplasm, Nucleus. [UniProt]



#### ARG58269 anti-p90 RSK phospho (Thr359) antibody WB image

Western blot:  $25 \ \mu g$  of C6 cells treated by PMA/TPA (200 nM) for 30 min after serum-starvation overnight. The blot was stained with ARG58269 anti-p90 RSK phospho (Thr359) antibody at 1:1000 dilution.