

Anti-p90RSK Antibody
Mouse Anti Human Monoclonal Antibody
Catalog # AP53425**Specification**

Anti-p90RSK Antibody - Product Information

Application	WB, IP
Primary Accession	Q15418
Other Accession	NM_002953
Reactivity	Human, Mouse, Monkey
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Immunogen	Purified recombinant human p90RSK protein fragments expressed in E.coli.
Purification	Affinity purified
Calculated MW	90 KDa

Anti-p90RSK Antibody - Additional Information**Gene ID** 6195**Other Names**

90 kDa ribosomal protein S6 kinase 1;dj590P13.1 (ribosomal protein 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.

Dilution

WB~~1:1000

IP~~N/A

Format

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide, pH 7.3.

Storage

Store at -20 °C.Stable for 12 months from date of receipt

Anti-p90RSK Antibody - Protein Information**Name** RPS6KA1**Synonyms** MAPKAPK1A, RSK1

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 (PubMed:10679322, PubMed:12213813, PubMed:15117958, PubMed:16223362, PubMed:17360704, PubMed:18722121, PubMed:26158630, PubMed:35772404, PubMed:9430688). In fibroblast, is required for EGF-stimulated phosphorylation of CREB1, which results in the subsequent transcriptional activation of several immediate-early genes (PubMed:18508509, PubMed:18813292). In response to mitogenic stimulation (EGF and PMA), phosphorylates and activates NR4A1/NUR77 and ETV1/ER81 transcription factors and the cofactor CREBBP (PubMed:12213813, PubMed:16223362). Upon insulin-derived signal, acts indirectly on the transcription regulation of several genes by phosphorylating GSK3B at 'Ser-9' and inhibiting its activity (PubMed:18508509, PubMed:18813292). 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 (PubMed:17360704). In response to insulin, phosphorylates EIF4B, enhancing EIF4B affinity for the EIF3 complex and stimulating cap- dependent translation (PubMed:16763566). 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 (PubMed:15342917). Also involved in feedback regulation of mTORC1 and mTORC2 by phosphorylating DEPTOR (PubMed:22017876). Mediates cell survival by phosphorylating the pro- apoptotic proteins BAD and DAPK1 and suppressing their pro-apoptotic function (PubMed:10679322, PubMed:16213824). Promotes the survival of hepatic stellate cells by phosphorylating CEBPB in response to the hepatotoxin carbon tetrachloride (CCl4) (PubMed:11684016). Mediates induction of hepatocyte proliferation by TGFA through phosphorylation of CEBPB (PubMed:18508509, PubMed:18813292). 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 (PubMed:18508509, PubMed:18813292). Phosphorylates EPHA2 at 'Ser-897', the RPS6KA-EPHA2 signaling pathway controls cell migration (PubMed:26158630). In response to mTORC1 activation, phosphorylates EIF4B at 'Ser-406' and 'Ser-422' which stimulates bicarbonate cotransporter SLC4A7 mRNA translation, increasing SLC4A7 protein abundance and

function (PubMed:35772404).

Cellular Location

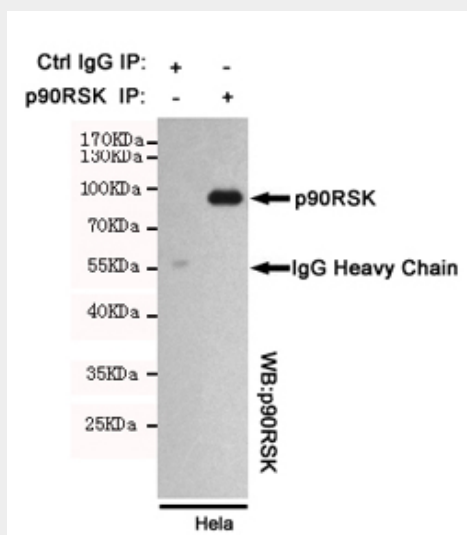
Nucleus. Cytoplasm.

Anti-p90RSK Antibody - Protocols

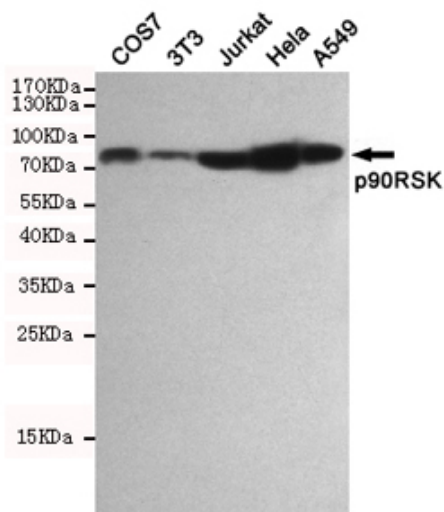
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-p90RSK Antibody - Images



Immunoprecipitation analysis of HeLa cell lysates using p90RSK mouse mAb.



Western blot detection of p90RSK in COS7,3T3,Jurkat,HeLa and A549 cell lysates using p90RSK mouse mAb(dilution 1:1000).Predicted band size:90kDa.Observed band size:90kDa.

Anti-p90RSK Antibody - Background

Serine/threonine kinase that may play a role in mediating the growth-factor and stress induced activation of the transcription factor CREB.