

Phospho-RPS6KA1(S363) Antibody
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP3461a

Specification

Phospho-RPS6KA1(S363) Antibody - Product Information

Application	DB,E
Primary Accession	Q15418
Other Accession	P10666 , P10665 , P18652
Reactivity	Human
Predicted	Chicken, Xenopus
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit Ig
Calculated MW	82723

Phospho-RPS6KA1(S363) Antibody - Additional Information

Gene ID 6195

Other Names

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

Target/Specificity

This RPS6KA1 Antibody is generated from rabbits immunized with a KLH conjugated synthetic phosphopeptide corresponding to amino acid residues surrounding S363 of human RPS6KA1.

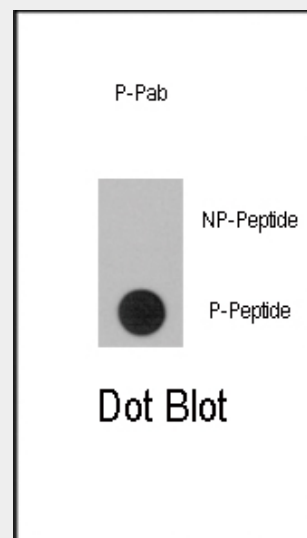
Dilution

DB~~1:500

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage



Dot blot analysis of anti-RPS6KA1-pS363 Phospho-specific Pab (RB13296) on nitrocellulose membrane. 50ng of Phospho-peptide or Non Phospho-peptide per dot were adsorbed. Antibody working concentrations are 0.5ug per ml.

Phospho-RPS6KA1(S363) Antibody - Background

RSK1 is 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.

Phospho-RPS6KA1(S363) Antibody - References

Roux, P.P., et al., Proc. Natl. Acad. Sci. U.S.A. 101(37):13489-13494 (2004).
Bohuslav, J., et al., J. Biol. Chem. 279(25):26115-26125 (2004).
Hu, Y., et al., J. Biol. Chem.

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Phospho-RPS6KA1(S363) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

279(28):29325-29335 (2004).
Fernando, R.I., et al., Mol. Biol. Cell
15(7):3266-3284 (2004).
Cavet, M.E., et al., J. Biol. Chem.
278(20):18376-18383 (2003).

Phospho-RPS6KA1(S363) 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. 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 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 CEBPB in response to the hepatotoxin carbon tetrachloride (CCl₄). Mediates induction of hepatocyte proliferation 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).

Cellular Location

Nucleus. Cytoplasm.

**Phospho-RPS6KA1(S363) 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](#)