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RSK4 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7944a

Product Information

Application	WB, IHC-P, E
Primary Accession	Q9UK32
Reactivity	Human, Monkey
Predicted	Mouse, Rat, Bovine, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	83872
Antigen Region	15-45

Additional Information

Gene ID	27330
Other Names	Ribosomal protein S6 kinase alpha-6, S6K-alpha-6, 90 kDa ribosomal protein S6 kinase 6, p90-RSK 6, p90RSK6, Ribosomal S6 kinase 4, RSK-4, pp90RSK4, RPS6KA6, RSK4
Target/Specificity	This RSK4 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 15-45 amino acids from the N-terminal region of human RSK4.
Dilution	WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	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	RSK4 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	RPS6KA6
Synonyms	RSK4
Function	Constitutively active serine/threonine-protein kinase that exhibits

	growth-factor-independent kinase activity and that may participate in p53/TP53-dependent cell growth arrest signaling and play an inhibitory role during embryogenesis.
Cellular Location	Cytoplasm, cytosol. Nucleus. Note=Predominantly cytosolic

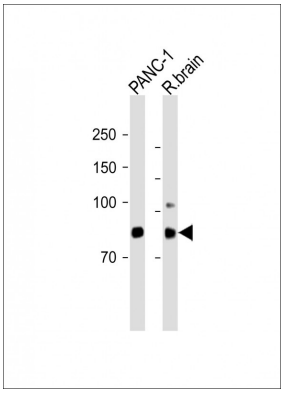
Background

Protein kinases are enzymes that transfer a phosphate group from a phosphate donor, generally the g phosphate of ATP, onto an acceptor amino acid in a substrate protein. By this basic mechanism, protein kinases mediate most of the signal transduction in eukaryotic cells, regulating cellular metabolism, transcription, cell cycle progression, cytoskeletal rearrangement and cell movement, apoptosis, and differentiation. With more than 500 gene products, the protein kinase family is one of the largest families of proteins in eukaryotes. The family has been classified in 8 major groups based on sequence comparison of their tyrosine (PTK) or serine/threonine (STK) kinase catalytic domains. The AGC kinase group consists of 63 kinases including the cyclic nucleotide-regulated protein kinase (PKA & PKG) family, the diacylglycerol-activated/phospholipid-dependent protein kinase C (PKC) family, the related to PKA and PKC (RAC/Akt) protein kinase family, the kinases that phosphorylate G protein-coupled receptors family (ARK), and the kinases that phosphorylate ribosomal protein S6 family (RSK). The calcium/calmodulin-dependent kinase (CAMK) group consists of 75 kinases regulated by Ca2+/CaM and close relative family (CAMK, CAMKL, DAPK, MAPKAPK).

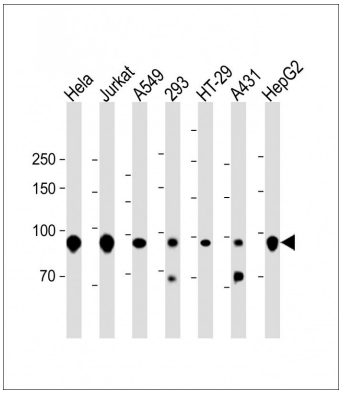
References

Yntema, H.G., et al., Genomics 62(3):332-343 (1999).

Images

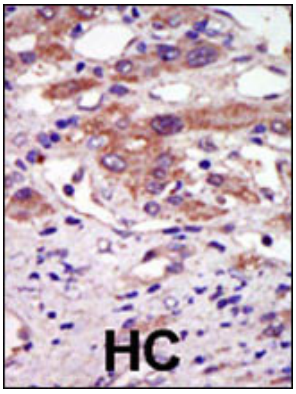


All lanes: Anti-hRSK4-G30 at 1:2000 dilution Lane 1: PANC-1 whole cell lysate Lane 2: Rat brain lysate Lysates/proteins at 20 µg per lane. Secondary: Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size: 84 KDa Blocking/Dilution buffer: 5% NFDM/TBST.



All lanes: Anti-RSK4 Antibody (N-term) at 1:2000 dilution Lane 1: Hela whole cell lysate Lane 2: Jurkat whole cell lysate Lane 3: A549 whole cell lysate Lane 4: 293 whole cell lysate Lane 5: HT-29 whole cell lysate Lane 5: a431 whole cell lysate Lane 5: HepG2 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary: Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size: 90 KDa Blocking/Dilution buffer: 5% NFDM/TBST.

Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was



peroxidase-conjugated to the secondary antibody, followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

Citations

- Anti-invasive and antimetastatic activities of ribosomal protein S6 kinase 4 in breast cancer cells.
- RSK2 activity mediates glioblastoma invasiveness and is a potential target for new therapeutics.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.