

RSK4 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP7944a

Specification

RSK4 Antibody (N-term) - Product Information

Application Primary Accession Reactivity Host Clonality Isotype Antigen Region WB, IHC-P,E <u>O9UK32</u> Human, Monkey Rabbit Polyclonal Rabbit IgG 15-45

RSK4 Antibody (N-term) - 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~~1:50~100 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.

RSK4 Antibody (N-term) - 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

RSK4 Antibody (N-term) - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

RSK4 Antibody (N-term) - 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.





RSK4 Antibody (N-term) (Cat. #AP7944a) is used to detect RSK4 in primate brain tissue lysate (lane 2).



RSK4 Antibody (N-term) (Cat. #AP7944a) is used to detect RSK4 in 7 different cell lines. Data courtesy of Dr. Yuan Sun, Hormel Institute, University of Minnesota.



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.

RSK4 Antibody (N-term) - 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).

RSK4 Antibody (N-term) - References

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

- **RSK4 Antibody (N-term) Citations**
 - <u>RSK2 activity mediates glioblastoma invasiveness and is a potential target for new therapeutics.</u>
 - Anti-invasive and antimetastatic activities of ribosomal protein S6 kinase 4 in breast cancer cells.