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## AP20853PU-N Polyclonal Antibody to RPS6KB1 / STK14A pThr444 - Aff - Purified

Alternate names: 70 kDa ribosomal protein S6 kinase 1, 70 kDa ribosomal protein S6 kinase 1,

Ribosomal protein S6 kinase I, Ribosomal protein S6 kinase beta-1, S6K-beta-1, S6K1, Serine/threonine-protein kinase 14A, p70 S6 kinase alpha, p70 S6K-alpha, p70 S6KA,

p70-S6K1

Quantity: 0.1 mg
Concentration: 1.0 mg/ml

**Background:** p70 S6 kinase is a mitogen activated Ser/Thr protein kinase that is required for cell

growth and G1 cell cycle progression. p70 S6 kinase phosphorylates the S6 protein of

the 40S ribosomal subunit and is involved in translational control of 5'

oligopyrimidine tract mRNAs. A second isoform, p85 S6 kinase, is derived from the same gene and is identical to p70 S6 kinase except for 23 extra residues at the amino terminus, which encode a nuclear localizing signal. Ser411, Thr421 and Ser424 lie within a Ser-Pro-rich region located in the pseudosubstrate region. Phosphorylation at

these sites is thought to activate p70 S6 kinase via relief of pseudosubstrate suppression. Another LY294002 and rapamycin sensitive phosphorylation site, Ser371, is an in vitro substrate for mTOR and correlates well with the activity of a

partially rapamycin resistant mutant p70 S6 kinase.

Uniprot ID: <u>P23443</u>
NCBI: <u>NP\_003152</u>

GeneID: 6198
Host: Rabbit

Format: State: Liquid purified lg fraction

**Purification:** Affinity chromatography (> 95% (by SDS-PAGE) **Buffer System:** Phosphate buffered saline (PBS), pH 7.2.

Preservatives: 0.09% sodium azide

Stabilizers: 50% glycerol

**Applications:** Western blot: 1/500 - 1/1000.

Immunohistochemistry on paraffin sections: 1/50 - 1/200.

Immunofluorescence: 1/50 - 1/200.

Other applications not tested. Optimal dilutions are dependent on conditions and

should be determined by the user.

Molecular Weight: ~59,70,85 kDa

**Specificity:** This antibody detects endogenous levels of p-p70 S6 kinase alpha protein only when

phosphorylated at Thr421.

Species Reactivity: Tested: Human.

Expected from sequence similarity: Mouse and Rat.

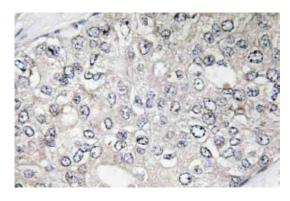
Storage:

Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.

Avoid repeated freezing and thawing. Shelf life: one year from despatch.

**Pictures:** 

Immunohistochemistry (IHC) analyzes of p-p70 S6 kinase alpha antibody (Cat.-No.: AP20853PU-N) in paraffinembedded human breast carcinoma tissue.



Western blot (WB) analysis of p-p70 S6K antibody (Cat.-No.: AP20853PU-N) at 1/500 dilution
Lane1:HepG2 whole cell lysate treated with EGF
Lane2:Mouse brain tissue lysate

Lane3: Rat brain tissue lysate

