

Product datasheet for **AP20854PU-M**

S6K1 (RPS6KB1) pSer447 Rabbit Polyclonal Antibody

Product data:

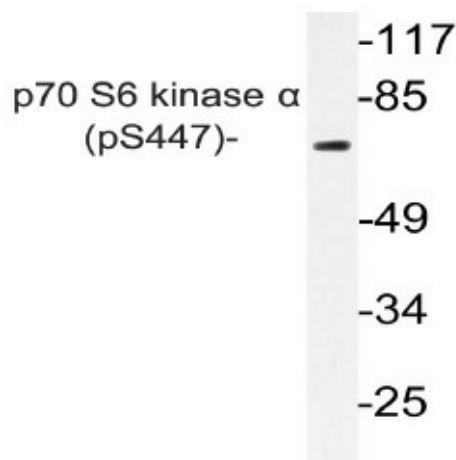
Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	Western blot: 1/500 - 1/1000. Immunohistochemistry on paraffin sections 1/50 - 1/200.
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Specificity:	This antibody detects endogenous levels of p70 S6 kinase alpha protein only when phosphorylated at Ser424.
Formulation:	Phosphate buffered saline (PBS), pH 7.2. State: Aff - Purified State: Liquid purified Ig fraction Stabilizer: 50% glycerol Preservative: 0.09% sodium azide
Concentration:	1.0 mg/ml
Purification:	Affinity chromatography (> 95% (by SDS-PAGE)
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	~59,70,85 kDa
Gene Name:	ribosomal protein S6 kinase B1
Database Link:	<u>Entrez Gene 72508 Mouse</u> <u>Entrez Gene 83840 Rat</u> <u>Entrez Gene 6198 Human P23443</u>



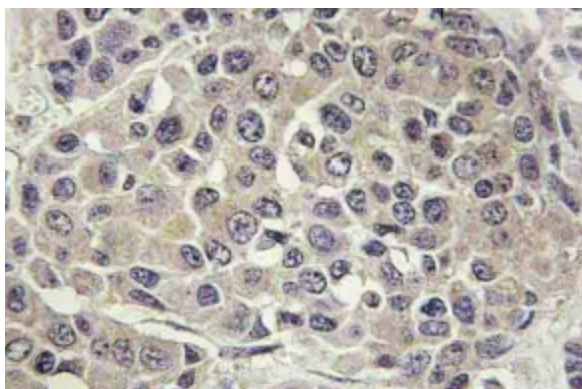
[View online »](#)

- 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.
- Synonyms:** Ribosomal protein S6 kinase I, S6K1, p70 S6 kinase alpha, p70 S6K-alpha, p70 S6KA, Serine/threonine-protein kinase 14A
- Protein Families:** Druggable Genome, Protein Kinase
- Protein Pathways:** Acute myeloid leukemia, ErbB signaling pathway, Fc gamma R-mediated phagocytosis, Insulin signaling pathway, mTOR signaling pathway, TGF-beta signaling pathway

Product images:



Western blot (WB) analyzes of p-p70 S6 kinase alpha antibody (Cat.-No.: [AP20854PU-N]) in extracts from A549 PMA cells.



Immunohistochemistry (IHC) analyzes of p-p70 S6 kinase alpha antibody (Cat.-No.: [AP20854PU-N]) in paraffin-embedded human breast carcinoma tissue.