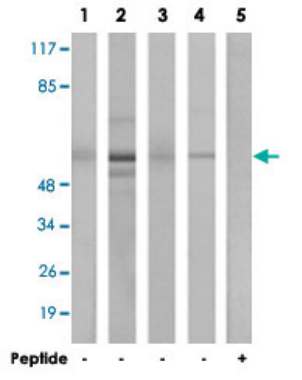
RPS6KB1 polyclonal antibody

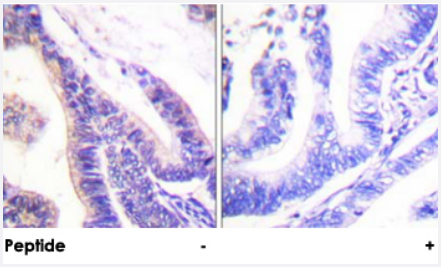
Catalog # PAB18200 Size 100 ug

Applications



Western Blot (Cell lysate)

Western blot analysis of extracts from COLO 205 cells (Lane 1), Jurkat cells (Lane 2), MCF-7 cells (Lane 3) and HeLa cells (Lane 4 and 5), using RPS6KB1 polyclonal antibody (Cat # PAB18200).
Peptide "+" means "peptide blocking".



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunohistochemical analysis of paraffin-embedded human colon carcinoma tissue using RPS6KB1 polyclonal antibody (Cat # PAB18200).
Peptide "+" means "peptide blocking".

Specification

Product Description	Rabbit polyclonal antibody raised against synthetic peptide of RPS6KB1.
Immunogen	A synthetic peptide corresponding to residues surrounding S418 of human RPS6KB1.
Host	Rabbit
Reactivity	Human, Mouse, Rat
Specificity	This antibody is specific to RPS6KB1.
Form	Liquid

Purification	Affinity purification
Concentration	1 mg/mL
Recommend Usage	Western Blot (1:500-1:1000) Immunohistochemistry (1:50-1:100) ELISA (1:20000) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS, 150mM NaCl, pH 7.4 (50% glycerol, 0.02% sodium azide)
Storage Instruction	Store at -20°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only.

Applications

- Western Blot (Cell lysate)

  Western blot analysis of extracts from COLO 205 cells (Lane 1), Jurkat cells (Lane 2), MCF-7 cells (Lane 3) and HeLa cells (Lane 4 and 5), using RPS6KB1 polyclonal antibody (Cat # PAB18200).
  Peptide "+" means "peptide blocking".

- Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

  Immunohistochemical analysis of paraffin-embedded human colon carcinoma tissue using RPS6KB1 polyclonal antibody (Cat # PAB18200).
  Peptide "+" means "peptide blocking".

- Enzyme-linked Immunoabsorbent Assay

Gene Info — RPS6KB1

Entrez GeneID	6198
Protein Accession#	P23443
Gene Name	RPS6KB1
Gene Alias	PS6K, S6K, S6K1, STK14A, p70(S6K)-alpha, p70-S6K, p70-alpha
Gene Description	ribosomal protein S6 kinase, 70kDa, polypeptide 1
Omim ID	608938

Gene Ontology	Hyperlink
Gene Summary	This gene encodes a member of the RSK (ribosomal S6 kinase) family of serine/threonine kinase s. This kinase contains 2 non-identical kinase catalytic domains and phosphorylates several resid ues of the S6 ribosomal protein. The kinase activity of this protein leads to an increase in protein synthesis and cell proliferation. Amplification of the region of DNA encoding this gene and overex pression of this kinase are seen in some breast cancer cell lines. Alternate translational start sites have been described and alternate transcriptional splice variants have been observed but have n ot been thoroughly characterized. [provided by RefSeq
Other Designations	p70 S6 kinase, alpha 1|p70 S6 kinase, alpha 2|ribosomal protein S6 kinase, 70kD, polypeptide 1 |serine/threonine kinase 14 alpha

Publication Reference

- Differential activation mechanisms of Erk-1/2 and p70(S6K) by glucose in pancreatic beta-cells.

  Briaud I, Lingohr MK, Dickson LM, Wrede CE, Rhodes CJ.

  Diabetes 2003 Apr; 52(4):974.

  Application: WB, Rat, INS-1 cells, Islets

- Ultraviolet-induced phosphorylation of p70(S6K) at Thr(389) and Thr(421)/Ser(424) involves hydrogen peroxide and mammalian target of rapamycin but not Akt and atypical protein kinase C.

  Huang C, Li J, Ke Q, Leonard SS, Jiang BH, Zhong XS, Costa M, Castranova V, Shi X.

  Cancer Research 2002 Oct; 62(20):5689.

- The activated glucocorticoid receptor modulates presumptive autoregulation of ribosomal protein S6 protein kinase, p70 S6K.

  Shah OJ, Iniguez-Lluhi JA, Romanelli A, Kimball SR, Jefferson LS.

  The Journal of Biological Chemistry 2002 Jan; 277(4):2525.

  Application: WB-Ce, Human, Monkey, Mouse, Rat, C2C12, COS-7, HEK 293, L6 cells

Pathway

- Acute myeloid leukemia
- ErbB signaling pathway
- Fc gamma R-mediated phagocytosis
- Insulin signaling pathway
- mTOR signaling pathway

- TGF-beta signaling pathway

Disease

- Cardiovascular Diseases
- Diabetes Mellitus
- Edema
- Head and Neck Neoplasms
- Neoplasm Recurrence
- Neoplasms