Product Datasheet

p70 S6 Kinase Antibody

Catalog No: #21276

Package Size: #21276-1 50ul #21276-2 100ul

Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

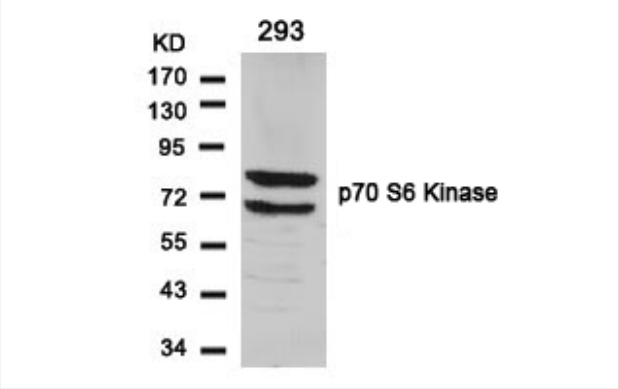
Description

Product Name	p70 S6 Kinase Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Antibodies were produced by immunizing rabbits with synthetic peptide and KLH conjugates. Antibodies were purified by affinity-chromatography using epitope-specific peptide.
Applications	WB;IHC;IF
Species Reactivity	Human;Mouse;Rat
Specificity	The antibody detects endogenous level of total p70 S6 Kinase protein.
Immunogen Type	Peptide-KLH
Immunogen Description	Peptide sequence around aa.422~426 (P-V-S-P-V) derived from Human p70S6k.
Conjugates	Unconjugated
Target Name	p70 S6 Kinase
Other Names	KS6B1; P70-S6K; RPS6KB1; S6K;
Accession No.	Swiss-Prot: P23443NCBI Protein: NP_003152.1
Calculated MW	59kDa
SDS-PAGE MW	70,85kd
Concentration	1.0mg/ml
Formulation	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C for long term preservation (recommended). Store at 4°C for short term use.

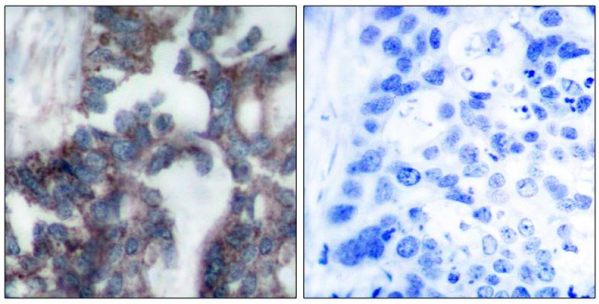
Application Details

WB 1:500-1:2000; IHC 1:50-1:200; IF 1:50-1:200;

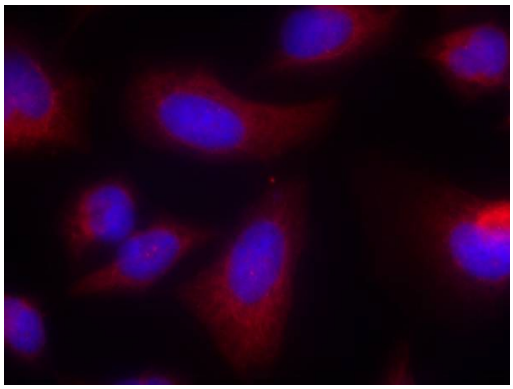
Images



Western blot analysis of extracts from 293 cells using p70 S6 Kinase(Ab-424) Antibody #21276.



Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using p70 S6 Kinase(Ab-424) Antibody #21276(left) or the same antibody preincubated with blocking peptide(right).



Immunofluorescence staining of methanol-fixed Hela cells using p70 S6 Kinase(Ab-424) Antibody #21276.

Background

RPS6KB1 phosphorylates the Ribosomal Protein-S6. Activation of RPS6KB1 requires a complex, ordered series of conformational changes and phosphorylation reactions. While the role of sequential, multi-site phosphorylation has been extensively detailed, characterization of the priming step required to initiate this cascade has remained elusive. Probably this priming process is dependent on calcium. Calcium-dependent regulation of RPS6KB1 does not specifically target Thr-229 and Thr-389, the key regulatory phosphorylation sites; rather, calcium chelation results in a global inhibition of RPS6KB1 phosphorylation. The initial calcium-dependent process is required to release an inhibitory interaction between the C- and N-termini of RPS6KB1, thus allowing phosphorylation of key domains. The priming event involves formation of a calcium-dependent protein complex that releases the interaction between the N- and C-termini. RPS6KB1 is then accessible for activation by the kinases that target the known regulatory phosphorylation sites .

Satoru Eguchi et al. (1999) J Biol Chem, Vol. 274: 36843-36851

Papst PJ, et al. (1998) J Biol Chem. 273(24):15077-84.

Ulrike Krause et al. (2002) Eur. J. Biochem. 269: 3751-3759 c

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Published Papers

el at., 5-HT 2 receptor mediates high-fat diet-induced hepatic steatosis and very low density lipoprotein overproduction in rats.In Obes Res Clin Pract. On 2018 Jan - Feb by Li X, Guo K et al..PMID: 27133527, , (2018)

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el at., Effect of electrical stimulation combIned with diet therapy on InsulIn resistance via mTOR signalIng. In Mol Med Rep on 2019 Dec by Huang S, Tang N, et al..PMID:31702811, , (2019)

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el at., Effective treatment with combination of peripheral 5ı ζ• • ydroxytryptamine synthetic inhibitor and 5ı ζ• • ydroxytryptamine 2 receptor antagonist on glucocorticoidı ζ• nduced wholeı ζ• ody insulin resistance with hyperglycemia.In J Diabetes Investig on 2016 Nov by Shaoxin Ma , Tao Li et al..PMID:27177506, , (2016)

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PMID:26936292

Note: This product is for in vitro research use only and is not intended for use in humans or animals.