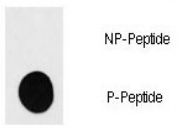
Phospho-p70S6K (pS418) Antibody / Phospho-S6K1 Antibody (F48493)

Catalog No.	Formulation	Size
F48493-0.4ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.4 ml
F48493-0.08ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.08 ml

Citations (1)

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Predicted Reactivity	Mouse, Rat, Bovine, Rabbit
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Antigen affinity
UniProt	P23443
Applications	Dot blot: 1:500
Limitations	This Phospho-p70S6K (pS418) Antibody / Phospho-S6K1 Antibody is available for research use only.



Phospho-p70S6K (pS418) Antibody Phosphopeptide Specificity Dot Blot. Dot blot testing of Phospho-p70S6K (pS418) Antibody using 50 ng per dot of phosphorylated or non-phosphorylated S6K1 peptide. Strong reactivity is observed with the pS418 phosphopeptide, while the corresponding non-phosphorylated peptide shows little to no signal. The selective recognition of the phosphorylated peptide demonstrates specificity for the Ser418 phospho-epitope and supports studies of site-specific S6K1 phosphorylation.

Description

Phospho-p70S6K (pS418) Antibody / Phospho-S6K1 Antibody recognizes a phosphorylated form of p70 S6 kinase 1 (S6K1), a serine/threonine protein kinase encoded by the RPS6KB1 gene. S6K1 belongs to the AGC kinase family and functions as an important downstream component of signaling pathways that coordinate nutrient availability and growth signals with protein synthesis, cellular growth and metabolism. The protein is also known as p70S6K, p70 S6 kinase

alpha and ribosomal protein S6 kinase beta-1.

S6K1 is closely associated with mechanistic target of rapamycin complex 1 (mTORC1) signaling. Activation of the kinase requires multiple phosphorylation events that regulate its catalytic and autoinhibitory regions. Once activated, S6K1 phosphorylates downstream substrates involved in translation and other growth-associated cellular processes. Through these activities, S6K1 helps connect extracellular growth signals, cellular energy status and nutrient availability with the machinery controlling protein production and cell growth.

Phosphorylation within the regulatory C-terminal portion of S6K1 contributes to the multistep mechanism controlling kinase activation. The pS418-directed antibody provides a reagent for investigating phosphorylation at this specific serine site rather than measuring total S6K1 protein abundance. Phospho-S6K1 signaling is studied extensively in research involving mTOR pathway activity, cellular growth, metabolism, translation and cancer biology.

This rabbit polyclonal antibody was generated against a KLH-conjugated synthetic phosphopeptide corresponding to amino acid residues surrounding phosphorylated Ser418 of human RPS6KB1 and was purified by antigen affinity chromatography. Dot blot testing with phosphorylated and non-phosphorylated peptides provides direct validation of phosphopeptide-selective recognition. NSJ Bioreagents provides this Phospho-p70S6K (pS418) Antibody for research into site-specific S6K1 phosphorylation and mTOR-associated signaling. A Phospho-S6K1 Antibody can support studies examining regulation of p70S6K phosphorylation in growth and metabolic signaling pathways.

Explore our Phospho Antibody - Phosphorylation Specific Antibodies page for additional reagents targeting site-specific protein phosphorylation in kinase and signal transduction pathways.

Application Notes

Titration of the Phospho-p70S6K (pS418) Antibody / Phospho-S6K1 Antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

This Phospho-p70S6K (pS418) Antibody was produced from rabbits immunized with a KLH conjugated synthetic phosphopeptide corresponding to amino acid residues surrounding pS418 of human RPS6KB1.

Storage

Aliquot the Phospho-p70S6K (pS418) Antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

Phospho-p70S6K (pS418) antibody, Phospho-S6K1 antibody, Phospho-RPS6KB1 antibody, p-p70S6K antibody, p70 S6 kinase alpha antibody, S6K1 pS418 antibody

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