# abcam

## Product datasheet

## Anti-S6K1 antibody ab14708

4 References 画像数 3

#### 製品の概要

製品名 Anti-S6K1 antibody

製品の詳細 Goat polyclonal to S6K1

由来種 Goat

アプリケーション 適用あり: WB, IHC-P

種交差性 交差種: Mouse, Human

交差が予測される動物種: Rat, Rabbit, Cow, Dog, Xenopus laevis 🔥

免疫原 Synthetic peptide: MISKRPEHLRMNL, corresponding to amino acids 490-502 of S6K1.

■ Run BLAST with EXPASY ■ Run BLAST with MENTAL NORTH N

特記事項

The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

## 製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw

cycles.

**バッファー** pH: 7.30

Preservative: 0.02% Sodium azide

Constituents: Tris buffered saline, 0.5% BSA

精製度 Immunogen affinity purified

特記事項(精製) Purified from goat serum by ammonium sulphate precipitation followed by antigen affinity

chromatography using the immunizing peptide.

**ポリ/モノ** ポリクローナル

アイソタイプ lgG

**The Abpromise guarantee** <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab14708の使用に適用されます アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
WB		Use a concentration of 0.05 - 0.1 µg/ml. Detects a band of approximately 65-70 kDa (predicted molecular weight: 60 kDa). A 1 hour primary incubation is recommended for this product.
IHC-P		Use a concentration of 2 - 4 µg/ml. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

#### ターゲット情報

#### 機能

Acts to integrate nutrient and growth factor signals in regulation of protein synthesis, cell proliferation, cell growth, cell cycle progression and cell survival. Downstream effector of the mTOR signaling pathway. Phosphorylates specifically ribosomal protein S6 in response to insulin or several classes of mitogens. During translation initiation, the inactive form associatess with the eIF-3 complex under conditions of nutrient depletion. Mitogenic stimulation leads to phosphorylation and dissociation from the eIF-3 complex and the free activated form can phosphorylate other translational targets including EIF4B. Promotes protein synthesis by phosphorylating PDCD4 at 'Ser-67' and targeting it for degradation. Phosphorylates RICTOR leading to regulation of mammalian target of rapamycin complex 2 (mTORC2) signaling; probably phosphorylates RICTOR at 'Thr-1135'. Phosphorylates IRS1 at multiple serine residues coupled with insulin resistance; probably phosphorylates IRS1 at 'Ser-270'. Required for TNF-alpha induced IRS-1 degradation. Phosphorylates EEF2K in response to IGF1 and inhibits EEF2K activity. Phosphorylates BAD at 'Ser-99' in response to IGF1 leading to BAD inactivation and inhibition of BAD-induced apoptosis. Phosphorylates mitochondrial RMP leading to dissociation of a RMP:PPP1CC complex; probably phosphorylates RMP at 'Ser-99'. The free mitochondrial PPP1CC can dephosphorylate RPS6KB1 at Thr-412 which is proposed to be a negative feed back mechanism for the RPS6KB1 antiapoptotic function. Phosphorylates GSK3B at 'Ser-9' under conditions leading to loss of the TSC1-TSC2 complex. Phosphorylates POLDIP3.

#### 組織特異性

Widely expressed.

## 配列類似性

Belongs to the protein kinase superfamily. AGC Ser/Thr protein kinase family. S6 kinase subfamily.

Contains 1 AGC-kinase C-terminal domain.

Contains 1 protein kinase domain.

#### ドメイン

The autoinhibitory domain is believed to block phosphorylation within the AGC-kinase C-terminal domain and the activation loop.

The TOS (TOR signaling) motif is essential for activation by mTORC1.

## 翻訳後修飾

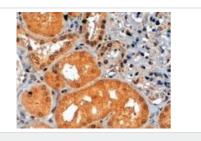
Phosphorylation at Thr-412 is regulated by mTORC1. The phosphorylation at this site is

maintained by an agonist-dependent autophosphorylation mechanism.

#### 細胞内局在

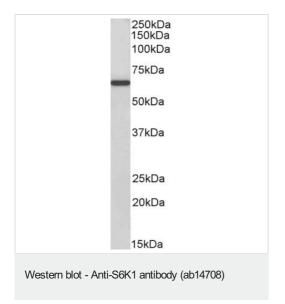
 $\label{lem:cytoplasm:synapse} \textbf{Cytoplasm: Nucleus. Cytoplasm and Cell junction} > \textbf{synapse} > \textbf{synaptosome. Mitochondrion outer}$ 

membrane.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-S6K1 antibody (ab14708)

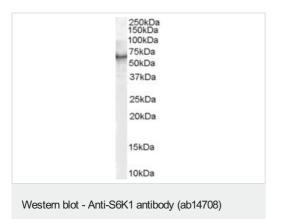
ab14708 (2µg/ml) staining of paraffin embedded Human Kidney shows staining in the cytoplasm-rich PCT while less so in the DCT and no signals in the glomerulus. following steamed antigen retrieval with citrate buffer pH 6 and HRP-staining.



Anti-S6K1 antibody (ab14708) at 1  $\mu$ g/ml + NIH3T3 cell lysate (in RIPA buffer). at 35  $\mu$ g

Predicted band size: 60 kDa

Detected by chemiluminescence.



Anti-S6K1 antibody (ab14708) at 0.3  $\mu$ g/ml + Human Placenta lysate (in RIPA buffer) at 35  $\mu$ g

Predicted band size: 60 kDa

Detected by chemiluminescence.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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