abcam

Product datasheet

Anti-S6K1 antibody [E175] ab32359



★★★★★ 4 Abreviews 61 References

画像数 5

製品の概要

製品名 Anti-S6K1 antibody [E175]

製品の詳細 Rabbit monoclonal [E175] to S6K1

由来種 Rabbit

特異性 This antibody may detect both phosphorylated and non-phosphorylated forms of p70 S6 Kinase.

アプリケーション 適用あり: WB, IHC-P

適用なし: Flow Cyt or ICC/IF

種交差性 交差種: Mouse, Human

交差が予測される動物種: Rat, Cow 4

免疫原 Synthetic peptide within Human S6K1. The exact sequence is proprietary.

ポジティブ・コントロール Jurkat cell lysate; human breast carcinoma WB: C-Myc/DDK tagged human S6K1 recombinant

protein, C-Myc/DDK tagged human S6K2 recombinant protein.

特記事項 This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity

- Long-term security of supply

- Animal-free production

For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

製品の特性

製品の状態

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

バッファー pH: 7.20

Preservative: 0.05% Sodium azide

Constituents: 40% Glycerol (glycerin, glycerine), 9.85% Tris glycine, 50% Tissue culture

supernatant

精製度 Protein A purified

ポリ/モノ モノクローナル

クローン名 E175

アイソタイプ IgG

アプリケーション

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ab32359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	★★★★☆ (1)	1/1000 - 1/5000. Detects a band of approximately 70 kDa (predicted molecular weight: 59 kDa).
IHC-P	★★★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★	1/50. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

追加情報

Is unsuitable for Flow Cyt or ICC/IF.

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.

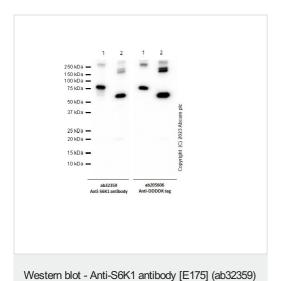
The TOS (TOR signaling) motif is essential for activation by mTORC1.

翻訳後修飾

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

Cytoplasm; Nucleus. Cytoplasm and Cell junction > synapse > synaptosome. Mitochondrion outer membrane.

画像



All lanes: Anti-S6K1 antibody [E175] (ab32359) at 1/1000 dilution

Lane 1 : C-Myc/DDK tagged human S6K1 recombinant protein 10ng

Lane 2 : C-Myc/DDK tagged human S6K2 recombinant protein 10ng

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (<u>ab97051</u>) at 1/20000 dilution

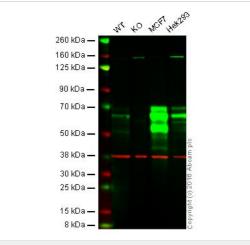
Predicted band size: 59 kDa **Observed band size:** 60,75 kDa

Exposure time: 10 seconds

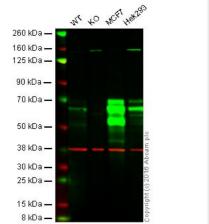
Blocking and dilution buffer and concentration: 5% NFDM/TBST.

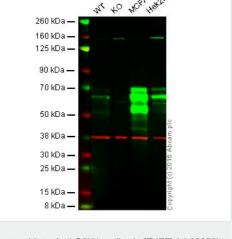
<u>ab205606</u> was also used at 1/1000 dilution to detect C-Myc/DDK tagged human S6K1 and S6K2 recombinant proteins shown on the right panel.

ab32539 showed cross reactivity with S6K2 in recombinant protein testing. S6K1 and S6K2 have different observed band size in endogenous and recombinant protein tests.



Western blot - Anti-S6K1 antibody [E175] (ab32359)





Paraffin-embedded human breast carcinoma

ab32359 at 1/50 dilution

Lane 1: Wild-type HAP1 cell lysate (20 µg)

Lane 3: MCF7 cell lysate (20 µg)

kDa.

Lane 4: HEK293 cell lysate (20 µg)

Lane 2: S6K1 knockout HAP1 cell lysate (20 µg)

Lanes 1 - 4: Merged signal (red and green). Green - ab32359

ab32359 was shown to recognize S6K1 when S6K1 knockout

samples were used, along with additional cross-reactive bands.

Wild-type and S6K1 knockout samples were subjected to SDS-

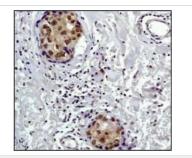
PAGE. ab32359 and ab8245 (loading control to GAPDH) were diluted 1/1000 and 1/10000 respectively and incubated overnight at

4°C. Blots were developed with goat anti-rabbit lgG (H + L) and goat anti-mouse IgG (H + L) secondary antibodies at 1/10000

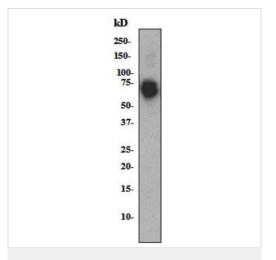
dilution for 1 hour at room temperature before imaging.

observed at 68 kDa. Red - loading control, ab8245, observed at 37

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



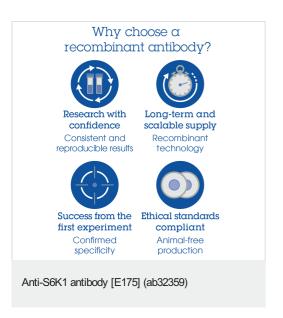
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-S6K1 antibody [E175] (ab32359)



Western blot - Anti-S6K1 antibody [E175] (ab32359)

Anti-S6K1 antibody [E175] (ab32359) + HEK-293T (Human epithelial cell line from embryonic kidney transformed with large T antigen) whole cell lysate

Predicted band size: 59 kDa



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