abcam

Product datasheet

Anti-GSK3 beta (phospho S9) antibody ab9769

4 References 2 Images

Overview

Product name Anti-GSK3 beta (phospho S9) antibody

Description Rabbit polyclonal to GSK3 beta (phospho S9)

Host species Rabbit

Specificity Gives strong signal to GSK 3 beta in westerns at the estimated mol weight (49 kD). May show

very weak reactivity to GSK 3 alpha.

Tested applications Suitable for: WB

Species reactivity Reacts with: Human

Immunogen Synthetic peptide: RRTT_pSFAE, corresponding to amino acids 4-12 of Human GSK3 beta.

Run BLAST with
Run BLAST with

Properties

Form Liquid

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

cycles.

Storage buffer 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, 0.01% Sodium Azide, pH 7.2

Purity Immunogen affinity purified

Clonality Polyclonal

Isotype IgG

Applications

The Abpromise guarantee Our Abpromise guarantee covers the use of ab9769 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/1000.

Function

Participates in the Wnt signaling pathway. Implicated in the hormonal control of several regulatory proteins including glycogen synthase, MYB and the transcription factor JUN. Phosphorylates JUN at sites proximal to its DNA-binding domain, thereby reducing its affinity for DNA. Phosphorylates MUC1 in breast cancer cells, and decreases the interaction of MUC1 with CTNNB1/beta-catenin. Phosphorylates CTNNB1/beta-catenin. Phosphorylates SNAI1. Plays an important role in ERBB2-dependent stabilization of microtubules at the cell cortex. Prevents the phosphorylation of APC and CLASP2, allowing its association with the cell membrane. In turn, membrane-bound APC allows the localization of MACF1 to the cell membrane, which is required for microtubule capture and stabilization. Phosphorylates MACF1 and this phosphorylation inhibits the binding of MACF1 to microtubules which is critical for its role in bulge stem cell migration and skin wound repair.

Tissue specificity

Expressed in testis, thymus, prostate and ovary and weakly expressed in lung, brain and kidney.

Sequence similarities

Belongs to the protein kinase superfamily. CMGC Ser/Thr protein kinase family. GSK-3 subfamily. Contains 1 protein kinase domain.

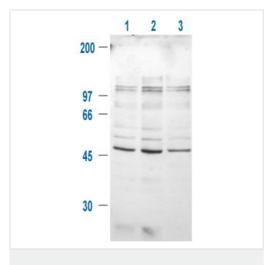
Post-translational modifications

Phosphorylated by AKT1 and ILK1. Activated by phosphorylation at Tyr-216.

Cellular localization

Cytoplasm. Nucleus. Cell membrane. The phosphorylated form shows localization to cytoplasm and cell membrane. The MEMO1-RHOA-DIAPH1 signaling pathway controls localization of the phosophorylated form to the cell membrane.

Images



Western blot - Anti-GSK3 beta (phospho S9) antibody (ab9769)

This image is courtesy of Angela Carter, Experimental Therapeutics, Ontario Cancer Inst, Toronto, Canada

Rabbit polyclonal to phospho GSK beta (Ser 9) at 1/1000 on 293T cell extract shows a band at 49 kD.

Cells were serum starved for 24 hours:

Lane 1: control

Lane 2: treated with IGF-1 (100 ng/ml) for 20 min

Lane 3: pre-treated with 10 uM LY294002 (selective PI3K inhibitor)

and treated with IGF-1 (100 ng/ml) for 20 min

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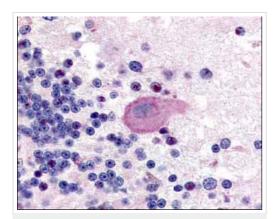
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Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-GSK3 beta (phospho S9) antibody (ab9769)

IHC-P of ab9769 at 1:100 dilution detecting phosphorylated Huntingtin in human brain cerebellum. Positive cytoplasmic staining is observed in neurons.

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