

Product datasheet

Anti-GSK3 beta (phospho S9) antibody ab131097

19 References 5 Images

Overview

Product name	Anti-GSK3 beta (phospho S9) antibody
Description	Rabbit polyclonal to GSK3 beta (phospho S9)
Host species	Rabbit
Tested applications	Suitable for: WB, IHC-P, ICC/IF
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Synthetic phosphopeptide around phosphorylation site of Serine 9 (T-T-S(p)-F-A) of Human GSK3 beta (NP_001139628.1; UniProt P49841), conjugated to KLH. Run BLAST with Run BLAST with
Positive control	293 cell extract treated with serum; HeLa cells; Human breast carcinoma and lung carcinoma tissues.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
Storage buffer	pH: 7.40 Preservative: 0.02% Sodium azide Constituents: 49% PBS, 50% Glycerol, 0.88% Sodium chloride Note: PBS is without Mg ²⁺ and Ca ²⁺
Purity	Immunogen affinity purified
Purification notes	ab131097 was purified by affinity chromatography using epitope specific phosphopeptide. Non phospho specific antibodies were removed by chromatography using non phosphopeptide.
Clonality	Polyclonal
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab131097** 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		1/500 - 1/1000. Predicted molecular weight: 46 kDa.
IHC-P		1/50 - 1/100.
ICC/IF		1/100 - 1/200.

Target

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.

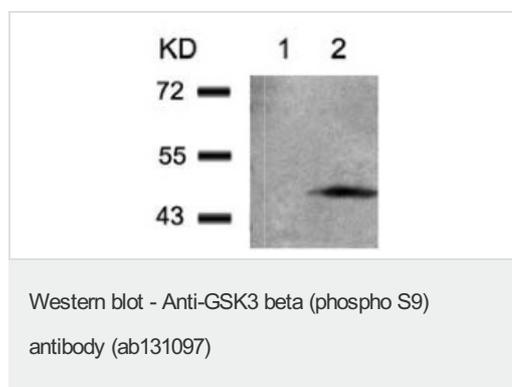
Post-translational modifications

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 phosphorylated form to the cell membrane.

Images

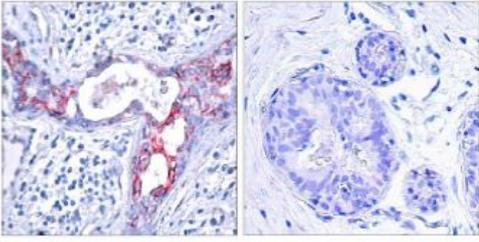


All lanes : Anti-GSK3 beta (phospho S9) antibody (ab131097) at 1/500 dilution

Lane 1 : 293 cell extract, untreated

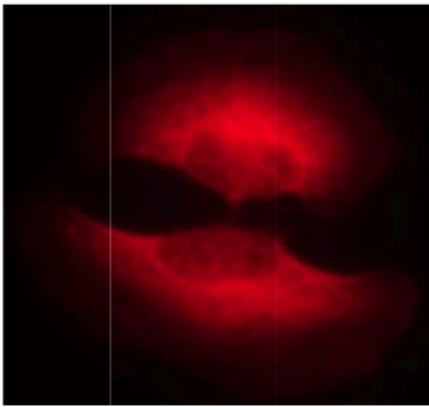
Lane 2 : 293 cell extract treated with serum

Predicted band size: 46 kDa



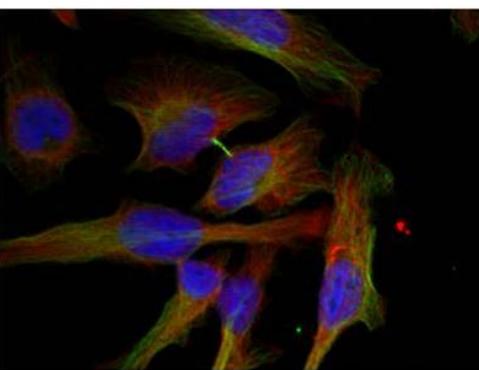
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-GSK3 beta (phospho S9) antibody (ab131097)

Immunohistochemical staining of GSK3 beta (phospho S9) in paraffin embedded Human breast carcinoma tissue, using ab131097 at a 1/50 dilution.



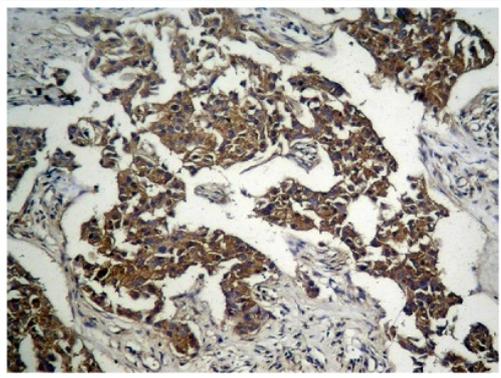
Immunocytochemistry/ Immunofluorescence - Anti-GSK3 beta (phospho S9) antibody (ab131097)

Immunofluorescence analysis of methanol fixed HeLa cells staining GSK3 beta (phospho S9) with ab131097 at a dilution of 1/100.



Immunocytochemistry/ Immunofluorescence - Anti-GSK3 beta (phospho S9) antibody (ab131097)

Methanol-fixed HeLa (human epithelial cell line from cervix adenocarcinoma) cells stained for GSK3 beta (phospho S9) (red) using ab131097 at 1/100 dilution in ICC/IF.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-GSK3 beta (phospho S9) antibody (ab131097)

Paraffin-embedded human lung carcinoma tissue stained for GSK3 beta (phospho S9) using ab131097 at 1/50 dilution in immunohistochemical analysis.

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