# abcam

# Product datasheet

# Anti-GSK3 beta (phospho S9) antibody ab107166

★★★★★ <u>5 Abreviews</u> <u>13 References</u> 3 图像

概述

产品名称 Anti-GSK3 beta (phospho S9)抗体

描述 兔多克隆抗体to GSK3 beta (phospho S9)

宿主 Rabbit

经测试应用 适用于: ICC/IF, IHC-P, WB

种属反应性 与反应: Human

预测可用于: Mouse, Rat, Sheep, Rabbit, Cow, Dog, Pig, Chimpanzee, Zebrafish, Macaque

monkey, Gorilla 🔷

免疫原 Synthetic peptide corresponding to Human GSK3 beta aa 1-100 conjugated to keyhole limpet

haemocyanin.

(Peptide available as ab129226)

**阳性**对照 This antibody gave a positive signal in the following whole cell lysates: HeLa; Jurkat; A549. It also

gave a positive result in MCF7 cell line. This antibody gave a positive result in IHC in the following

FFPE tissue: Human breast adenocarcinoma

常规说明

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

性能

形式 Liquid

**存放说明** Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -

80°C. Avoid freeze / thaw cycle.

**存储溶液** pH: 7.40

Preservative: 0.02% Sodium azide

Constituent: PBS

Batches of this product that have a concentration < 1 mg/ml may have BSA added as a stabilising

agent. If you would like information about the formulation of a specific lot, please contact our

scientific support team who will be happy to help.

纯**度** Immunogen affinity purified

应用

## The Abpromise quarantee Abpromise™承诺保证使用ab107166于以下的经测试应用

"应用说明"部分 下显示的仅为推荐的起始稀释度:实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
ICC/IF	<b>★★★★★ (3)</b>	Use a concentration of 1 µg/ml.
IHC-P		Use a concentration of 1 µg/ml. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
WB	★ ★ ★ ☆ ☆ (2)	Use a concentration of 1 µg/ml. Detects a band of approximately 47 kDa (predicted molecular weight: 47 kDa).

#### 靶标

功能

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.

组织**特异性** 

 $\label{thm:expressed} \textbf{Expressed in testis, thymus, prostate and ovary and weakly expressed in lung, brain and kidney.}$ 

序列相似性

 $Belongs \ to \ the \ protein \ kinase \ superfamily. \ CMGC \ Ser/Thr \ protein \ kinase \ family. \ GSK-3 \ subfamily.$ 

Contains 1 protein kinase domain.

翻译后修饰

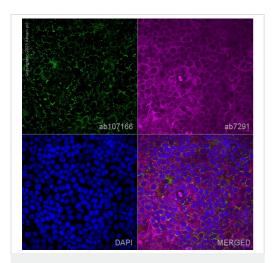
Phosphorylated by AKT1 and ILK1. Activated by phosphorylation at Tyr-216.

细胞定位

 $\label{thm:cytoplasm} \begin{tabular}{ll} Cytoplasm. Nucleus. Cell membrane. The phosphorylated form shows localization to cytoplasm and cell membrane. The MEMO1-RHOA-DIAPH1 signaling pathway controls localization of the loc$ 

phosophorylated form to the cell membrane.

### 图片



Immunocytochemistry/ Immunofluorescence - Anti-GSK3 beta (phospho S9) antibody (ab107166)



Western blot - Anti-GSK3 beta (phospho S9) antibody (ab107166)

ab107166 staining GSK3 beta (phospho S9) in MCF7 cells. The cells were fixed with 100% methanol (5 min), permeabilized with 0.1% PBS-Tween for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated overnight at 4°C with ab107166 at 1µg/ml and ab7291, Mouse monoclonal [DM1A] to alpha Tubulin - Loading Control. Cells were then incubated with ab150081, Goat polyclonal Secondary Antibody to Rabbit lgG - H&L (Alexa Fluor<sup>®</sup> 488), pre-adsorbed at 1/1000 dilution (shown in green) and ab150120, Goat polyclonal Secondary Antibody to Mouse lgG - H&L (Alexa Fluor<sup>®</sup> 594), pre-adsorbed at 1/1000 dilution (shown in pseudocolour magenta). Nuclear DNA was labelled with DAPI (shown in blue).

Image was acquired with a high-content analyser (Operetta CLS, Perkin Elmer) and a maximum intensity projection of confocal sections is shown.

**All lanes :** Anti-GSK3 beta (phospho S9) antibody (ab107166) at 1  $\mu$ g/ml (Milk blocked - 5%)

**Lane 1 :** HeLa (Human epithelial carcinoma cell line) Whole Cell Lysate

Lane 2 : Jurkat (Human T cell lymphoblast-like cell line) Whole Cell Lysate

**Lane 3**: A549 (Human lung adenocarcinoma epithelial cell line) Whole Cell Lysate

Lane 4 : HeLa (Human epithelial carcinoma cell line) Whole Cell Lysate with Immunizing peptide at 1 µg/ml

 $\textbf{Lane 5:} \ \, \textbf{Jurkat (Human T cell lymphoblast-like cell line) Whole Cell} \\ \, \textbf{Lysate with Immunizing peptide at 1 } \ \, \mu\text{g/ml} \\ \, \textbf{Immunizing peptide at 1 } \ \, \mu\text{g/ml} \\ \, \textbf{Model of the perturbation} \\ \, \textbf{Model o$ 

**Lane 6 :** A549 (Human lung adenocarcinoma epithelial cell line) Whole Cell Lysate with Immunizing peptide at 1  $\mu$ g/ml

Lysates/proteins at 10 µg per lane.

#### Secondary

**All lanes :** Goat Anti-Rabbit lgG H&L (HRP) preadsorbed (ab97080) at 1/5000 dilution

Developed using the ECL technique.

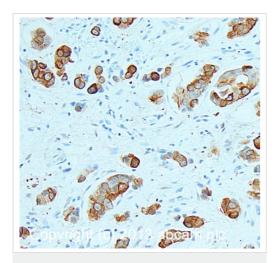
Performed under reducing conditions.

**Predicted band size:** 47 kDa **Observed band size:** 47 kDa

Additional bands at: 125 kDa, 28 kDa. We are unsure as to the

identity of these extra bands.

Exposure time: 12 minutes



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-GSK3 beta (phospho S9) antibody (ab107166)

IHC image of GSK3 beta (phospho S9) staining in Human breast adenocarcinoma formalin fixed paraffin embedded tissue section, performed on a Leica Bond™ system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab107166, 1µg/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.

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