# abcam

# Product datasheet

# Alexa Fluor® 647 Anti-GSK3 beta antibody [Y174] ab196910



重组 RabMAb

# 3 图像

#### 概述

产品名称 Alexa Fluor® 647荧光Anti-GSK3 beta抗体[Y174]

描述 Alexa Fluor® 647荧光兔单克隆抗体[Y174] to GSK3 beta

宿主 Rabbit

偶联物 Alexa Fluor® 647. Ex: 652nm, Em: 668nm

经测试应用 适用于: ICC/IF, Flow Cyt (Intra)

种属反应性 与反应: Human

免疫原 Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

阳性对照 ICC/IF: MCF7 cells. Flow Cyt (intra): MCF7 cells.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit 常规说明

monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

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outlicensing@thermofisher.com.

# 性能

形式

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

Avoid freeze / thaw cycle. Stable for 12 months at -20°C. Store In the Dark.

**存储溶液** pH: 7.40

Preservative: 0.02% Sodium azide

Constituents: PBS, 30% Glycerol (glycerin, glycerine), 1% BSA

纯度 Protein A purified

 克隆
 单克隆

 克隆编号
 Y174

 同种型
 IgG

#### 应用

## The Abpromise guarantee Abpromise™承诺保证使用ab196910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		1/100.
Flow Cyt (Intra)		1/50.  ab199093 - Rabbit monoclonal IgG (Alexa Fluor® 647), is suitable for use as an isotype control with this antibody.

#### 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

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

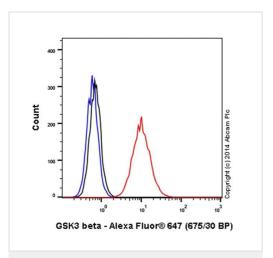
Phosphorylated by AKT1 and ILK1. Activated by phosphorylation at Tyr-216.

细胞定位

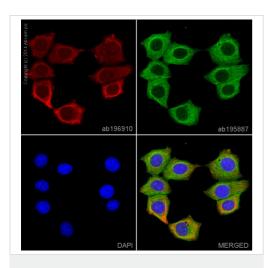
 $\label{thm:cytoplasm} \begin{tabular}{ll} Cytoplasm. Nucleus. Cell membrane. The phosphorylated form shows localization to cytoplasm and cell membrane. The MEMO1-RHOA-DIAPH1 signaling pathway controls localization of the controls of the control of the con$ 

phosophorylated form to the cell membrane.

#### 图片



Flow Cytometry (Intracellular) - Alexa Fluor® 647 Anti-GSK3 beta antibody [Y174] (ab196910)



Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 647 Anti-GSK3 beta antibody [Y174] (ab196910)

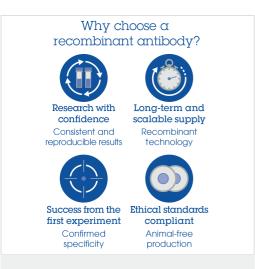
Overlay histogram showing MCF7 cells stained with ab196910 (red line). The cells were fixed with 4% formaldehyde (10 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab196910, 1/50 dilution) for 30 min at 22°C. Isotype control antibody (black line) was rabbit IgG (monoclonal) Alexa Fluor® 647 used at the same concentration and conditions as the primary antibody. Unlabelled sample (blue line) was also used as a control.

Acquisition of >5,000 events were collected using a solid-state 25mW red diode laser (635 nm) and 675/30 bandpass filter.

This antibody gave a positive signal in MCF7 fixed with 80% methanol (5 min)/permeabilized with 0.1% PBS-Tween for 20 min used under the same conditions.

ab196910 staining GSK3 in MCF7 cells. The cells were fixed with 4% formaldehyde (10 min), permeabilized in 0.1% Triton X-100 for 5 minutes and then blocked in 1% BSA/10% normal goat serum/0.3M glycine in 0.1%PBS-Tween for 1h. The cells were then incubated with ab196910 at 1/100 dilution (shown in red) and ab195887, Mouse monoclonal [DM1A] to alpha Tubulin (Alexa Fluor® 488, shown in green) at 1/167 dilution, overnight at +4°C. Nuclear DNA was labelled in blue with DAPI.

Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).



Alexa Fluor® 647 Anti-GSK3 beta antibody [Y174] (ab196910)

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