# abcam

## Product datasheet

## Anti-GSK3 beta antibody ab65740

### 2 References 1 Image

#### Overview

Product name Anti-GSK3 beta antibody

**Description** Sheep polyclonal to GSK3 beta

Host species Sheep

Tested applications Suitable for: 

□

Species reactivity Reacts with: Rat

**Immunogen** Synthetic peptide:

CNAASASASNST

, corresponding to C terminal amino acids 410-420 of Human GSK3 beta conjugated to KLH

Run BLAST with

Run BLAST with

Positive control Rat liver lysate.

**General notes**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

### **Properties**

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C short term (1-2 weeks). Store at -20°C or -80°C. Avoid freeze /

thaw cycle.

Storage buffer pH: 7.50

Preservative: 0.05% Sodium azide

Constituents: 0.238% HEPES, 0.87% Sodium chloride

**Purity** Immunogen affinity purified

**Clonality** Polyclonal

**Isotype** IgG

#### **Applications**

#### The Abpromise guarantee

Our Abpromise guarantee covers the use of ab65740 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                      |
|-------------|-----------|----------------------------|
| IP          |           | Use at 10 µg/mg of lysate. |

#### **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**

Sequence similarities

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

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

Contains 1 protein kinase domain.

## Post-translational

modifications

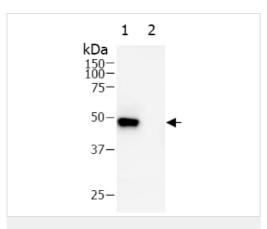
**Cellular localization** 

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

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**



Immunoprecipitation - Anti-GSK3 beta antibody (ab65740)

Immunoprecipitation of ab65740 with rat liver lysate using protein G beads (lane 1), and controls using beads alone (lane 2). Western blot analysis by another commercially available GSK3 antibody. Predicted Molecular weight 47kDa.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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- Replacement or refund for products not performing as stated on the datasheet
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- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <a href="https://www.abcam.com/abpromise">https://www.abcam.com/abpromise</a> or contact our technical team.

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