


## Product datasheet

# Anti-GSK3 alpha antibody [EP793Y] - BSA and Azide free ab236006

KO VALIDATED Recombinant RabMAB

5 Images

### Overview

<b>Product name</b>	Anti-GSK3 alpha antibody [EP793Y] - BSA and Azide free
<b>Description</b>	Rabbit monoclonal [EP793Y] to GSK3 alpha - BSA and Azide free
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB, IHC-P, ICC/IF
<b>Species reactivity</b>	<b>Reacts with:</b> Human <b>Predicted to work with:</b> Mouse, Rat 
<b>Immunogen</b>	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
<b>Positive control</b>	WB: HAP1, HEK293T, HepG2 and HeLa cell lysate. IHC-P: Human breast carcinoma tissue. ICC/IF: HeLa cells
<b>General notes</b>	<p>ab236006 is the carrier-free version of <a href="#">ab40870</a>.</p> <p>Our <b>carrier-free</b> antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.</p> <p>This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.</p> <p>Use our <b>conjugation kits</b> for antibody conjugates that are ready-to-use in as little as 20 minutes with &lt;1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.</p> <p>This product is compatible with the Maxpar<sup>®</sup> Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar<sup>®</sup> is a trademark of Fluidigm Canada Inc.</p> <p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"><li>- High batch-to-batch consistency and reproducibility</li><li>- Improved sensitivity and specificity</li><li>- Long-term security of supply</li><li>- Animal-free production</li></ul> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAB<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit</p>

monoclonal antibodies. For details on our patents, please refer to [RabMAb® patents](#).

## Properties

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<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C. Do Not Freeze.
<b>Storage buffer</b>	pH: 7.2 Constituent: PBS
<b>Carrier free</b>	Yes
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EP793Y
<b>Isotype</b>	IgG

## Applications

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**The Abpromise guarantee** Our [Abpromise guarantee](#) covers the use of ab236006 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
<b>WB</b>		Use at an assay dependent concentration. Detects a band of approximately 51 kDa (predicted molecular weight: 51 kDa).
<b>IHC-P</b>		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
<b>ICC/IF</b>		Use at an assay dependent concentration.

## Target

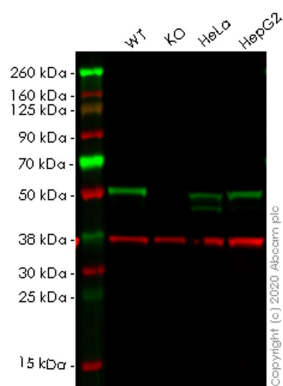
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<b>Function</b>	Implicated in the hormonal control of several regulatory proteins including glycogen synthase, MYB and the transcription factor JUN.
<b>Sequence similarities</b>	Belongs to the protein kinase superfamily. CMGC Ser/Thr protein kinase family. GSK-3 subfamily. Contains 1 protein kinase domain.

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## Images

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Western blot - Anti-GSK3 alpha antibody [EP793Y] - BSA and Azide free (ab236006)

**All lanes** : Anti-GSK3 alpha antibody [EP793Y] ([ab40870](#)) at 1/1000 dilution

**Lane 1** : Wild-type HEK-293T (Human epithelial cell line from embryonic kidney transformed with large T antigen) whole cell lysate

**Lane 2** : GSK3A knockout HEK-293T (Human epithelial cell line from embryonic kidney transformed with large T antigen) whole cell lysate

**Lane 3** : HeLa (Human epithelial cell line from cervix adenocarcinoma) whole cell lysate

**Lane 4** : HepG2 (Human liver hepatocellular carcinoma cell line) whole cell lysate

Lysates/proteins at 20 µg per lane.

### Secondary

**All lanes** : Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed ([ab216773](#)) at 1/10000 dilution

**Predicted band size:** 51 kDa

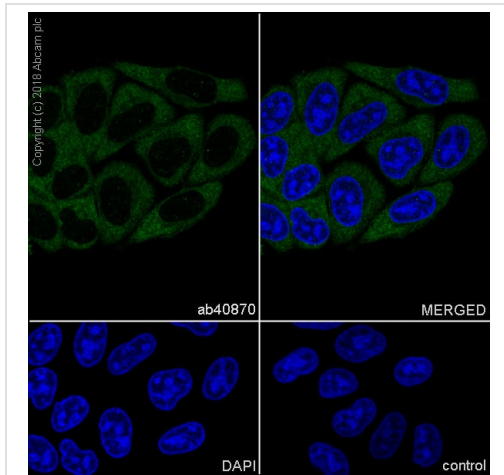
**Observed band size:** 51 kDa

This data was developed using [ab40870](#), the same antibody clone in a different buffer formulation.

**Lanes 1-4:** Merged signal (red and green). Green - [ab40870](#) observed at 51 kDa. Red - loading control [ab8245](#) observed at 36 kDa.

[ab40870](#) Anti-GSK3 alpha antibody [EP793Y] was shown to specifically react with GSK3 alpha in wild-type HEK-293T cells. Loss of signal was observed when knockout cell line [ab266742](#) (knockout cell lysate [ab257979](#)) was used. Wild-type and GSK3 alpha knockout samples were subjected to SDS-PAGE. [ab40870](#) and Anti-GAPDH antibody [6C5] - Loading Control ([ab8245](#)) were incubated overnight at 4°C at 1 in 1000 dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed ([ab216773](#)) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed ([ab216776](#))

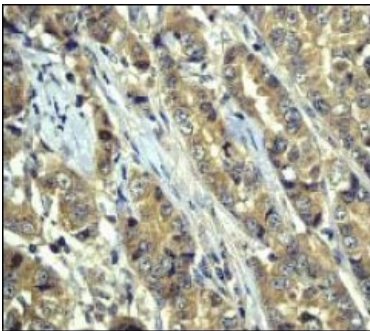
secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Immunocytochemistry/ Immunofluorescence analysis of HeLa (human cervix adenocarcinoma epithelial cell) cells labeling GSK3 alpha with purified **ab40870** at 1/200 dilution (10 µg/mL). Cells were fixed in 100% Methanol. Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) was used as the secondary antibody at 1/1000 (2 µg/mL) dilution. DAPI (blue) was used as nuclear counterstain.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab40870**).

Immunocytochemistry/ Immunofluorescence - Anti-GSK3 alpha antibody [EP793Y] - BSA and Azide free (ab236006)

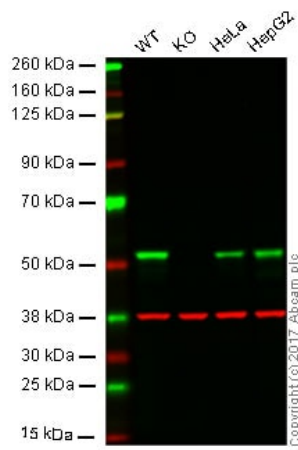


**ab4870** at 1/50 dilution, staining GSK3 alpha in Human breast carcinoma tissue by Immunohistochemistry, Paraffin embedded section.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab40870**).

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-GSK3 alpha antibody [EP793Y] - BSA and Azide free (ab236006)



Western blot - Anti-GSK3 alpha antibody [EP793Y] - BSA and Azide free (ab236006)

**Lane 1:** Wild-type HAP1 whole cell lysate (20 µg)

**Lane 2:** GSK3 alpha knockout HAP1 whole cell lysate (20 µg)

**Lane 3:** HeLa whole cell lysate (20 µg)





**Lane 4:** HepG2 whole cell lysate (20 µg)

**Lanes 1 - 4:** Merged signal (red and green). Green - **ab40870** observed at 51 kDa. Red - loading control, **ab8245**, observed at 37 kDa.

**ab40870** was shown to specifically react with GSK3 alpha in wild-type HAP1 cells. No band was observed when GSK3 alpha knockout samples were examined. Wild-type and GSK3 alpha knockout samples were subjected to SDS-PAGE. **ab40870** and **ab8245** (Mouse anti-GAPDH loading control) were incubated overnight at 4°C at a 1/5000 dilution and 1/10,000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed **ab216773** and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed **ab216776** secondary antibodies at 1/10,000 dilution for 1 hour at room temperature before imaging.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab40870**).

Why choose a recombinant antibody?

 <p><b>Research with confidence</b> Consistent and reproducible results</p>	 <p><b>Long-term and scalable supply</b> Recombinant technology</p>
 <p><b>Success from the first experiment</b> Confirmed specificity</p>	 <p><b>Ethical standards compliant</b> Animal-free production</p>

Anti-GSK3 alpha antibody [EP793Y] - BSA and Azide free (ab236006)

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

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