# Product datasheet

## Anti-GSK3 beta antibody ab131356

### Overview

<table>
<thead>
<tr>
<th>Product name</th>
<th>Anti-GSK3 beta antibody</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description</td>
<td>Rabbit polyclonal to GSK3 beta</td>
</tr>
<tr>
<td>Host species</td>
<td>Rabbit</td>
</tr>
<tr>
<td>Tested applications</td>
<td>Suitable for: WB, IHC-P, ICC/IF</td>
</tr>
<tr>
<td>Species reactivity</td>
<td>Reacts with: Mouse, Rat, Human</td>
</tr>
<tr>
<td>Immunogen</td>
<td>Synthetic peptide conjugated to KLH, surrounding amino acids 7-11 (TTSFA) of Human GSK3 beta (NP_001139628.1).</td>
</tr>
<tr>
<td>Positive control</td>
<td>A2780 and HT29 cell extracts; HeLa cells; Human breast carcinoma tissue</td>
</tr>
</tbody>
</table>

### Properties

<table>
<thead>
<tr>
<th>Form</th>
<th>Liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Storage instructions</td>
<td>Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.</td>
</tr>
<tr>
<td>Storage buffer</td>
<td>pH: 7.40</td>
</tr>
<tr>
<td></td>
<td>Preservative: 0.02% Sodium azide</td>
</tr>
<tr>
<td></td>
<td>Constituents: 49% PBS, 50% Glycerol, 0.88% Sodium chloride</td>
</tr>
<tr>
<td></td>
<td>PBS is without Mg²⁺ and Ca²⁺</td>
</tr>
<tr>
<td>Purity</td>
<td>Immunogen affinity purified</td>
</tr>
<tr>
<td>Purification notes</td>
<td>ab131356 is purified by affinity chromatography using epitope specific peptide.</td>
</tr>
<tr>
<td>Clonality</td>
<td>Polyclonal</td>
</tr>
<tr>
<td>Isotype</td>
<td>IgG</td>
</tr>
</tbody>
</table>

### Applications

Our Abpromise guarantee covers the use of ab131356 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.
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


Images

All lanes : Anti-GSK3 beta antibody (ab131356) at 1/500 dilution

Lane 1 : A2780 cell extract
Lane 2 : HT29 cell extract

Predicted band size: 48 kDa
Immunohistochemical analysis of paraffin embedded Human breast carcinoma tissue labelling GSK3 beta with ab131356 at a dilution of 1/50. Picture on the right was preincubated with blocking peptide.

Immunofluorescence of methanol-fixed HeLa cells staining GSK3 beta with ab131356 at a dilution of 1/100.

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