

## GSK3 beta [pS9] Rabbit Recombinant Oligoclonal Antibody – Purified

Publication Part no. MAN0004989

Rev. Date: 21 August 2011

Catalog Number: 710100

Store at 2–8°C

**Clonality:** Oligoclonal  
**Concentration:** 0.5 mg/mL  
**Quantity:** 100 µg  
**Volume:** 200 µL

**Host/Class:** Rabbit IgG  
**Reactivity:** Human GSK3 beta  
**Predicted Reactivity:** Human

### Product Description

GSK3 beta belongs to the subfamily of glycogen synthase kinases, that plays a central role in energy metabolism, neuronal cell development, and body pattern formation. GSK3 alpha and GSK3 beta are two isoforms with molecular weights of 51 kDa and 47 kDa respectively. The two isoforms have dissimilar function. GSK3 beta plays a key role in insulin and Wnt signaling. The phosphorylation at Ser<sup>9</sup> of GSK3 beta is shown to inhibit its kinase activity.

### Product Specifications

**Immunogen:** Phosphopeptide corresponding to amino acids 5–13 aa of Human GSK3 beta

**Alternate Names:** GSK3B

**Apparent MW:** ~47 kDa

**Gene ID:** 2932

**Protein Accession No.:** P49841

**Sequence Identity:** Human

**Sequence Homology:** Monkey, Rat and Mouse

**Clone/PAD:** 9HCLC

**Lot:** See product label

### Product Applications

| Application      | Species | Test Material  | Concentration                   |
|------------------|---------|----------------|---------------------------------|
| Western blotting | Human   | HeLa cells     | 2–5 µg/mL                       |
| Indirect ELISA   | Human   | Phosphopeptide | 1.5x10 <sup>-4</sup> to 3 µg/mL |

### Storage and Handling

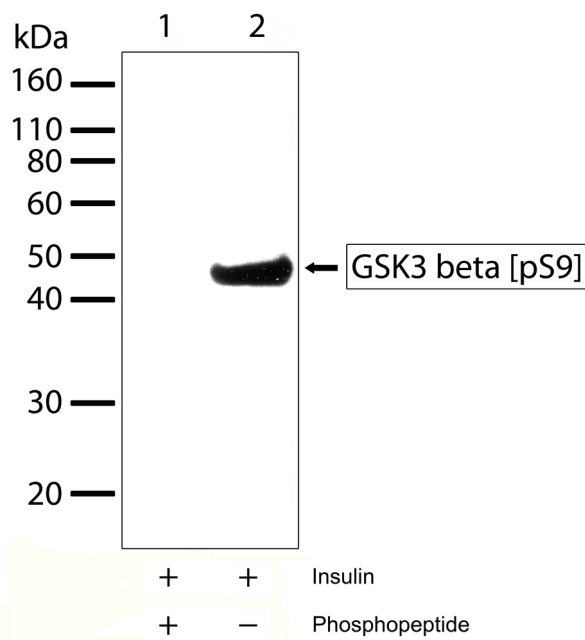
Store the antibody at 2–8°C for up to 1 month, or –20°C for long storage. Avoid repeated freezing and thawing.

### Stability

Expires one year from date of receipt when stored as instructed.

### Storage Buffer

Phosphate buffered saline (PBS) with 0.09% sodium azide.



**Figure 1** Western blot analysis of GSK3 beta [pS9] Rabbit Recombinant Oligoclonal Antibody (Cat. no. 710100). Western blot analysis was performed on whole cell extracts of HeLa treated with Insulin (100 ng/mL for 15 minutes, lanes 1 and 2). A band corresponding to phosphorylated GSK3 beta at ~47 kDa was detected using GSK3 beta [pS9] Rabbit Recombinant Oligoclonal Antibody at a concentration of 2.5 µg/mL (lane 2). To confirm specificity, competition was performed with the phosphopeptide (lane 1).

**For research use only. Not for human or animal therapeutic or diagnostic use.**

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## Safety Data Sheets (SDS)

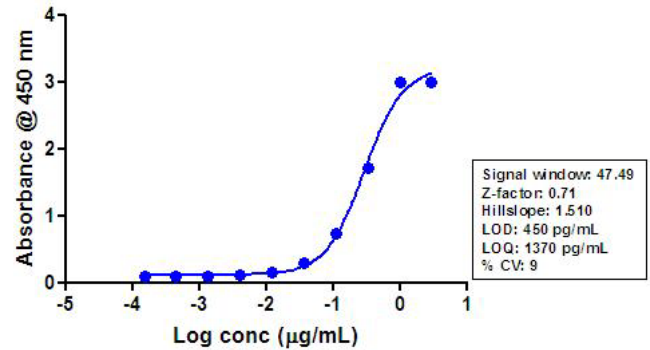
Safety Data Sheets (SDSs) are available at [www.invitrogen.com/sds](http://www.invitrogen.com/sds).

## Certificate of Analysis

The Certificate of Analysis provides detailed quality control and product qualification information for each product. Certificates of Analysis are available on our website. Go to [www.invitrogen.com/support](http://www.invitrogen.com/support) and search for the Certificate of Analysis by product lot number, which is printed on the box.

## Related Products

| Product Name                                     | Quantity | Catalog No. |
|--|----------|-------------|
| iBlot® Dry Blotting System                       | 1 unit   | IB1001      |
| WesternBreeze™ Chromogenic Kit Anti-Rabbit       | 1 kit    | WB7105      |
| WesternBreeze™ Chemiluminescent Kit, Anti-Rabbit | 1 kit    | WB7106      |
| Goat anti-mouse (H+L), HRP conj.                 | 1 mg     | G21040      |
| Goat anti-rabbit (H+L), HRP conj.                | 1 mg     | G21234      |
| Goat anti-mouse (H+L), AP conj.                  | 1 mg     | G21060      |
| Goat anti-rabbit (H+L), AP conj.                 | 1 mg     | G21079      |
| Nitrocellulose, 0.2 µm                           | 20/pack  | LC2000      |



**Figure 2** Indirect ELISA of GSK3 beta [pS9] Rabbit Recombinant Oligoclonal Antibody (Cat. no. 710100). Indirect ELISA was performed using various dilutions of GSK3 beta [pS9] Rabbit Recombinant Oligoclonal Antibody (Cat. no. 710100) to detect phospho GSK3 beta [pS9] peptide coated onto the plate. A non-linear regression analysis was performed (4 PL) and LOD and LOQ for the antibody was determined.

### Explanation of symbols

| Symbol | Description   | Symbol | Description                                  |
|--------|---|--------|--|
|        | Catalogue Number  |        | Batch code                                   |
|        | Research Use Only   |        | <i>In vitro</i> diagnostic medical device    |
|        | Use by  |        | Temperature limitation                       |
|        | Manufacturer  |        | European Community authorised representative |
|        | Without, does not contain   |        | With, contains                               |
|        | Protect from light  |        | Consult accompanying documents               |
|        | Directs the user to consult instructions for use (IFU), accompanying the product. |        |  |

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