



## Rabbit anti GSK-3 $\beta$ Polyclonal Antibody

Alternative Name(s): Glycogen Synthase Kinase 3 $\beta$

### Order Information

- **Description:** GSK-3 $\beta$
- **Catalogue:** 602-210
- **Lot:** See label
- **Size:** 100 $\mu$ g/200 $\mu$ l
- **Host:** Rabbit
- **Clone:** nan
- **Application:** IHC(P), WB
- **Reactivity:** Hu, Ms, Rt

### ANTIGEN PREPARATION

A synthetic peptide corresponding to the C-terminus of GSK-3 $\beta$  protein. This sequence is identical among human, mouse, rat, bovine, dog and chicken species.

### BACKGROUND

Glycogen Synthase Kinase-3 $\beta$  (GSK-3 $\beta$ ) is a serine/threonine kinase that affects glycogen metabolism by phosphorylating and down-regulating the activity of muscle glycogen synthase. Growth factor (such as Insulin) binds to its receptor, recruits PKB/AKT kinase to phosphorylate GSK-3 $\beta$  on Serine 9, which prevents GSK-3 $\beta$  from phosphorylating glycogen synthase. In contrast, the phosphorylation of tyrosine 216 in the catalytic domain increase this kinase activity to promote cell death under the absence of growth factors. GSK-3 $\beta$  is also involved in Wnt signaling pathway where it forms a complex with axin, beta-catenin and adenomatous polyposis coli (APC) protein, thus the GSK-3 $\beta$  inhibitor is considered as a potential approach in Alzheimer's Disease (AD) treatment.

### PURIFICATION

The Rabbit IgG is purified by Epitope Affinity Purification

### FORMULATION

This affinity purified antibody is supplied in sterile Phosphatebuffered saline (pH7.2) containing antibody stabilizer

### SPECIFICITY

This antibody recognizes GSK-3 $\beta$  protein. It reacts with human, mouse and rat. The other species are not tested.

### STORAGE

The antibodies are stable for 24 months from date of receipt when stored at -20 $^{\circ}$ C to -70 $^{\circ}$ C. The antibodies can be stored at 2 $^{\circ}$ C-8 $^{\circ}$ C for three month without detectable loss of activity. Avoid repeated freezing-thawing cycles.

### APPLICATIONS/SUGGESTED WORKING DILUTIONS\*

- Western Blot: 0.1-1  $\mu$ g/ml
- ELISA: 0.01-0.1  $\mu$ g/ml
- Immunoprecipitation: 2-5  $\mu$ g/ml
- IHC: 2-10  $\mu$ g/ml
- Flow cytometry: Not tested
- Molecular Weight: 46.0
- Positive Control: Kidney Tissue
- Cellular Location: Cell Membrane

\*Optimal dilutions should be determined by researchers for the specific applications.

### FOR RESEARCH USE ONLY.

AbboMax, Inc 2528 Qume Drive, Suite 8, San Jose, California 95131, USA  
1 408-573-1898 (Tel). 1 408-573-1858 (Fax). [www.abbomax.com](http://www.abbomax.com) [info@abbomax.com](mailto:info@abbomax.com)

## DATA ATTACHMENTS

**MW (kDa)**

**1**

100-

75-

50-

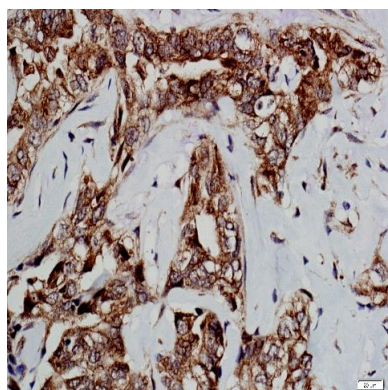
37-

25-

15-



Western Blot: The whole lysate derived from A431 (20 ug/lane) immunoblotted by Rabbit anti – GSK3b (Cat# 602-210) at 1:500. Observed a major immunoreactive band at molecular weight ~46kDa.



Immunohistochemistry: Human Breast carcinoma (FFPE) stained with Rabbit anti-GSK3 (Cat# 602-210) at 1:200 for 10 min @ RT. Staining of formalin-fixed tissue requires boiling tissue sections in 10 mM Citrate Buffer, pH 6.0 for 10 min followed by cooling at RT for 20 min.

## REFERENCES

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