

# AbboMax, Inc

Innovation at Work

## Rabbit anti-Phospho- GSK-3 $\beta$ (pSer<sup>9</sup>)

Synonym: Glycogen synthase kinase 3 beta (GSK3 $\beta$ )

### ANTIGEN PREPARATION

A synthetic peptide surrounding to the epitope -TTSFA- with a phosphorylation site at Ser9 of human GSK3-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-3beta on Serine 9, which prevents GSK-3beta 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-3beta 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-3beta inhibitor is considered as a potential approach in Alzheimer's Disease (AD) treatment.

### PURIFICATION

The Rabbit IgG is purified by site-modified Epitope Affinity Purification.

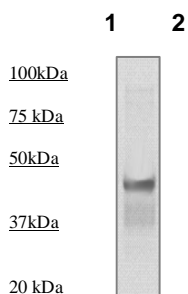
### SPECIFICITY

This antibody recognizes GSK-3beta (pS9) with a phosphorylated site at Serine 9. It does not cross-react with non-phosphospecific peptide.

### 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	Not tested
Flow cytometry	Not tested

### DATA ATTACHMENTS



**Western Blot:** The 3T3 cell lysate derived from conditioned culture medium was resolved onto 10% SDS-PAGE, transferred onto NC membrane, and followed by an immunoblotting with Rabbit anti GSK-3beta (ps9) (Cat#600-340) antibody at 1:500.

### Order Information

Description: Rabbit anti Phospho-GSK3b(pS9)  
Catalogue#: 600-340  
Lot#: See the label  
Size: 100  $\mu$ g/200  $\mu$ l  
Host: Rabbit  
Clone: N/A  
Application: ELISA, WB, IHC  
Reactivity: Hu: Rt: Ms.

### FORMULATION

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

### STORAGE

The antibodies are stable for 12 months from date of receipt when stored at  $-20^{\circ}\text{C}$  to  $-70^{\circ}\text{C}$ . The antibodies can be stored at  $2^{\circ}\text{C}$ - $8^{\circ}\text{C}$  for three month without detectable loss of activity. Avoid repeated freezing-thawing cycles.

<b>MOLECULAR WEIGHT:</b>	46 kDa
<b>POSITIVE CONTROL:</b>	3T3 cell lysate
<b>CELLULAR LOCATION:</b>	Cytoplasmic

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

### REFERENCES

Alan P. Kozikowski, et al. Highly Potent and Specific GSK-3 $\beta$  Inhibitors That Block Tau Phosphorylation and Decrease  $\alpha$ -Synuclein Protein Expression in a Cellular Model of Parkinson's Disease. ChemMedChem, 2006, 1(2), 256-266.

**FOR RESEARCH USE ONLY.**

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