

# Phospho-GSK-3 $\beta$ Polyclonal Antibody

**CATALOG #:** 3495-100**AMOUNT:** 100  $\mu$ g**LOT #:** \_\_\_\_\_**HOST:** Rabbit**IMMUNOGEN:** Synthetic peptide surrounding Ser9 of human GSK-3 $\beta$ **FORMULATION:**

100  $\mu$ g (0.5 mg/ml) immunoaffinity purified rabbit polyclonal antibody in phosphate buffered saline (PBS), pH 7.2, containing 50% glycerol, 1% BSA, 0.02% thimerosal.

**STORAGE CONDITIONS:**

Store at -20°C. For long term storage, aliquot and freeze at -70°C. Avoid repeated freeze/thaw cycles.

**BACKGROUND:**

Glycogen synthase kinase 3 (GSK-3) is a serine/threonine protein kinase that has been implicated in the regulation of cell fate and in the Wnt signaling pathway. GSK-3 plays an important role in the PI3 kinase and Akt mediated cell survival pathways, and its activity can be inhibited by Akt-mediated phosphorylation at Ser21 of GSK-3 $\alpha$  and Ser9 of GSK-3 $\beta$ . GSK-3 has also been implicated in Alzheimer's disease. Six Tau protein isoforms have been identified, all of which are phosphorylated by GSK-3.

**SPECIES REACTIVITY:** human, mouse, rat**APPLICATIONS AND USAGE:**

The antibody can be used for Western blot analysis (1-2  $\mu$ g/ml) and immunohistochemistry (15-30  $\mu$ g/ml). However, the optimal conditions should be determined individually.

**SPECIFICITY:**

The antibody detects phosphorylated GSK-3 $\beta$  (Ser9) in samples from human, mouse, and rat origin. It does not recognize the phosphorylated GSK-3 $\alpha$ .

**USAGE:** *For Research Use only! Not to be used in human.***RELATED PRODUCTS:**

## Apoptosis Detection Kits &amp; Reagents

- Annexin V Kits & Bulk Reagents
- Caspase Assay Kits & Reagents
- Mitochondrial Apoptosis Kits & Reagents
- Nuclear Apoptosis Kits & Reagents
- Apoptosis Inducers and Set
- Apoptosis siRNA Vectors

## Cell Fractionation System

- Mitochondria/Cytosol Fractionation Kit
- Nuclear/Cytosol Fractionation Kit
- Membrane Protein Extraction Kit
- Cytosol/Particulate Rapid Separation Kit
- Mammalian Cell Extraction Kit
- FractionPREP Fractionation System

## Cell Proliferation &amp; Senescence

- Quick Cell Proliferation Assay Kit
- Senescence Detection Kit
- High Throughput Apoptosis/Cell Viability Assay Kits
- LDH-Cytotoxicity Assay Kit
- Bioluminescence Cytotoxicity Assay Kit
- Live/Dead Cell Staining Kit

## Cell Damage &amp; Repair

- HDAC Fluorometric & Colorimetric Assays & Drug Discovery Kits
- HAT Colorimetric Assay Kit & Reagents
- DNA Damage Quantification Kit
- Glutathione & Nitric Oxide Fluorometric & Colorimetric Assay Kits

## Signal Transduction

- cAMP & cGMP Assay Kits
- Akt & JNK Activity Assay Kits
- Beta-Secretase Activity Assay Kit

## Adipocyte &amp; Lipid Transfer

- Recombinant Adiponectin, Survivin, & Leptin
- CETP Activity Assay & Drug Discovery Kits
- PLTP Activity Assay & Drug Discovery Kits
- Total Cholesterol Quantification Kit

## Molecular Biology &amp; Reporter Assays

- siRNA Vectors
- Cloning Insert Quick Screening Kit
- Mitochondrial & Genomic DNA Isolation Kits
- 5 Minutes DNA Ligation Kit
- 20 Minutes Gel Staining/Destaining Kit
- $\beta$ -Galactosidase Staining Kit & Luciferase Reporter Assay Kit

## Growth Factors and Cytokines

## Monoclonal and Polyclonal Antibodies