

## Phospho-GSK-3 $\alpha/\beta$ (Ser21/9) Polyclonal Antibody

**CATALOG #:** 3516-100

**AMOUNT:** 100  $\mu$ g

**LOT #:** \_\_\_\_\_

### FORMULATION:

100  $\mu$ g (0.5 mg/ml) affinity-purified rabbit polyclonal phospho-GSK-3 $\alpha/\beta$  (Ser21/9) polyclonal antibody in phosphate buffered saline (PBS), pH 7.2, containing 50% glycerol, 1% BSA, 0.02% sodium azide.

### STORAGE CONDITIONS:

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

### BACKGROUND:

GSK-3 is a serine/threonine protein kinase that phosphorylates and inactivates glycogen synthase. GSK-3 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 $\beta$ .

**SPECIES REACTIVITY:** human, mouse, rat

### APPLICATIONS AND USAGE:

The antibody can be used for Western blot analysis (1-2  $\mu$ g/ml), and immunohistochemistry (20-30  $\mu$ g/ml). However, the optimal conditions should be determined individually.

### SPECIFICITY:

The phospho-GSK-3 $\alpha/\beta$  (Ser21/9) antibody detects GSK-3 only when phosphorylated at Ser21 of GSK-3 $\alpha$  or Ser9 of GSK-3 $\beta$ .

**NOTE:** For Research Purpose Only! Not to be used in human.

### RELATED PRODUCTS:

#### Apoptosis Detection Kits & 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 & 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 & 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 & Lipid Transfer

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

#### Molecular Biology & 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