

## PRODUCT DATA SHEET

Bioworld Technology CO., Ltd.



### p-GSK3 $\alpha$ / $\beta$ (Y279/216) Peptide

Cat No.: BS4083P

#### Background

Glycogen synthase kinase-3  $\alpha$  and  $\beta$  (GSK-3 $\alpha$ ,  $\beta$ ) are serine/threonine kinases that regulate metabolic enzymes and transcription factors, which are responsible for coordinating processes such as glycogen synthesis and cell adhesion. GSK-3 $\beta$  activity is also required for nuclear activity of Rel dimers, which mediate an anti-apoptotic response to TNF $\alpha$  in mice. GSK-3 catalytic kinase activity is controlled through differential phosphorylation of serine/threonine residues, which have an inhibitory effect, and tyrosine residues, which have an activating effect. Growth factor stimulation of mammalian cells expressing GSK-3 $\alpha$  and GSK-3 $\beta$  induces phosphorylation of Ser 21 and Ser 9, respectively through a phosphatidylinositol 3-kinase (PI 3-kinase)-protein kinase B (PKB) dependent pathway, thereby enhancing proliferative signals. Additionally, GSK-3 physically associates with cAMP-dependent protein kinase A (PKA), which phosphorylates Ser 21 of GSK-3 $\alpha$  or Ser 9 of GSK-3 $\beta$  and inactivates both forms

#### Swiss-Prot

P49840/P49841

#### Applications

Blocking

#### Specificity

This peptide can be used with studies using BS4083 p-GSK3 $\alpha$ / $\beta$  (Y279/216) pAb.

#### Purification & Purity

Synthetic peptide p-GSK3 $\alpha$ / $\beta$  (Y279/216). (Note: the amino acid sequence is proprietary). The purity is > 98%.

#### Product

1 mg/ml in DI water.

#### Storage & Stability

Store at 4 °C short term. Aliquot and store at -20 °C long term. Avoid freeze-thaw cycles.

#### Research Use

For research use only, not for use in diagnostic procedure.