



Anti-Phospho-Ser⁹ GSK3 β

Catalog Number: SY-p1175-9

Size: 100 μ l

\$375.00

Product Description: Affinity purified rabbit polyclonal antibody

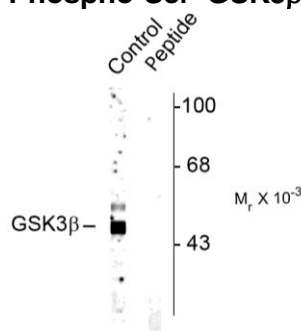
Applications: **WB:** 1:1000

Antigen: Phosphopeptide corresponding to amino acid residues surrounding the phospho-Ser⁹ of GSK3 β .

Species reactivity: The antibody has been directly tested for reactivity in Western blots with rat tissue. It is anticipated that the antibody will react with human, mouse, chicken, bovine, canine, non-human primate, Zebra fish and *Xenopus* based on the fact that these species have 100% homology with the amino acid sequence used as antigen.

Biological Significance: Glycogen synthase kinase 3 (GSK3) is a serine/threonine kinase that is involved in the regulation of many signaling pathways. To date, 2 isoforms have been identified: GSK3 α and GSK3 β . Specifically, GSK3 β has been shown to play a key inhibitory role in both the insulin and Wnt signaling pathways (Papkoff and Aikawa 1998). It has been suggested that Ser⁹ phosphorylation underlies the inhibition of GSK3 β by insulin (Sutherland et al., 1993).

Anti-Phospho-Ser⁹ GSK3 β



Western blot of rat cortex lysate showing specific immunolabeling of the ~46k GSK3 β protein phosphorylated at Ser⁹ (control). Immunolabeling is blocked by the phospho-peptide (peptide) used as antigen but not by the corresponding dephosphopeptide (not shown).

Purification Method: Prepared from rabbit serum by affinity purification via sequential chromatography on phospho- and dephosphopeptide affinity columns.

Antibody Specificity: Specific for the ~46k GSK3 β protein phosphorylated at Ser⁹. Also weakly labels the ~51k GSK3 α band due to the high degree of homology between the 2 subunits.

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WB = Western Blot **IF** = Immunofluorescence **IHC** = Immunohistochemistry **IP** = Immunoprecipitation

Packaging: 100 μ l in 10 mM HEPES (pH 7.5), 150 mM NaCl, 100 μ g BSA per ml and 50% glycerol. Adequate amount of material to conduct 10-mini Western Blots.

Storage and Stability. For long term storage -20°C is recommended. Stable at -20°C for at least 1 year.

Shipment: Domestic - Blue Ice; International - Dry Ice.

Immunolabeling is blocked by the phosphopeptide used as antigen but not by the corresponding dephosphopeptide.

Quality Control Tests: Western blots performed on each lot.

References:

Sutherland C, Leighton IA, Cohen P (1993) Inactivation of glycogen synthase kinase 3 beta by phosphorylation: new kinase connections in insulin and growth factor signaling. *Biochem J.* Nov 15; 296 (Pt. 1):15-9.

Papkoff J, Aikawa M (1998) WNT-1 and HGF regulate GSK3b activity and beta catenin signaling in mammary epithelial cells. *Biochem Biophys Res Commun.* Jun 29;247(3):851-8.

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