

Anti-phospho-GSK3 beta (Ser9)

Rabbit Polyclonal Antibody

Catalog # G09-652R

Lot # J1274-17

Cited Applications

WB

Suggested Dilutions:

WB 1:1,000

Ideal working dilutions for each application should be empirically determined by the investigator.

Specificity

Recognizes the GSK3 beta protein phosphorylated at serine 9

Cross Reactivity

Human, Mouse, Rat, Chicken, Bovine, Canine, non-Human Primate, Zebrafish and Xenopus

Host/Isotype/Clone#

Rabbit, IgG

Immunogen

Synthetic phospho-peptide corresponding to amino acid residues surrounding Ser9 conjugated to KLH

Formulation

100 µl in 10 mM HEPES (pH 7.5), 150 mM NaCl, 100 µg per ml BSA and 50% glycerol.

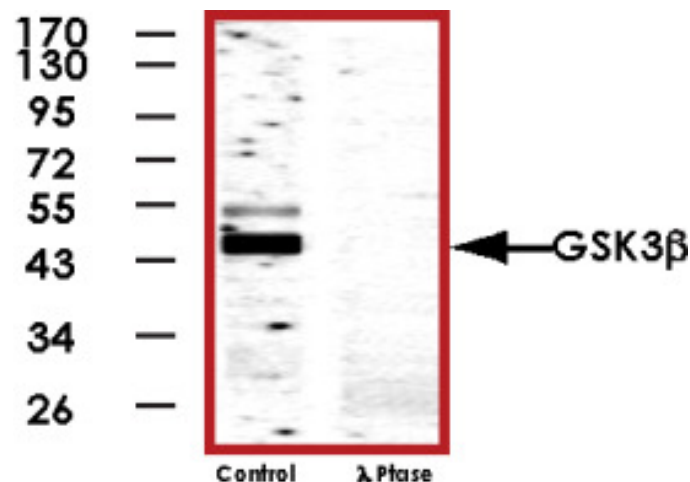
Scientific Background

Glycogen synthase kinase 3 (GSK3) is a serine/threonine kinase that is involved in the regulation of many signaling pathways. There have been two isoforms identified, GSK3alpha and GSK3beta. GSK3beta is ubiquitously expressed in human tissues and is implicated in regulating several physiological processes. These include the control of glycogen, protein synthesis by insulin and modulation of the transcription factors AP-1 and CREB. GSK3beta has been shown to play a key inhibitory role in both the insulin and Wnt signaling pathways (1). GSK3beta is inhibited by phosphorylation at Ser9. Insulin signaling is largely responsible for this mode of GSK3beta inhibition (2).

References

1. Papkoff, J. et al: WNT-1 and HGF regulate GSK3b activity and beta catenin signaling in mammary epithelial cells. *Biochem Biophys Res Commun.* 1998 Jun 29;247(3):851-8.
2. Sutherland, C. et al: Inactivation of glycogen synthase kinase 3 beta by phosphorylation: new kinase connections in insulin and growth factor signaling. *Biochem J.* 1993 Nov 15; 296 (Pt. 1):15-9.

Sample Data



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

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Purification

Affinity chromatography

Stability

1yr at -20°C from date of shipment

Storage & Shipping

Store product at -20°C. For optimal storage, aliquot antibody into smaller quantities after centrifugation and store at recommended temperature. For optimal performance, avoid repeated handling and multiple freeze/thaw cycles. Product shipped on ice packs.

To place your order, please contact us by phone 1-(604)-232-4600, fax 1-604-232-4601 or by email: orders@signalchem.com
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