

Phospho-Ser9 GSK3β Antibody

Affinity purified rabbit polyclonal antibody Catalog # AN1117

Specification

Phospho-Ser9 GSK3β Antibody - Product Information

Application
Primary Accession
Reactivity
Predicted

Host Clonality Calculated MW WB <u>P18266</u> Rat Bovine, Chicken, Human, Mouse, Monkey, Xenopus, Zebrafish Rabbit polyclonal 46 KDa

Phospho-Ser9 GSK3β Antibody - Additional Information

Gene ID	84027
Gene Name	GSK3B
Other Names	
Glycogen synthase kinase-3 beta, GSK3B, Gsk3b	GSK-3 beta, Factor A, FA, Serine/threonine-protein kinase

Target/Specificity

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

Dilution WB~~ 1:1000

Format

Prepared from rabbit serum by affinity purification via sequential chromatography on phosphoand 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. Immunolabeling is blocked by the phosphopeptide used as antigen but not by the corresponding dephosphopeptide

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Phospho-Ser9 GSK3 β Antibody is for research use only and not for use in diagnostic or the rapeutic procedures.

Shipping Blue Ice



Phospho-Ser9 GSK3β Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Phospho-Ser9 GSK3β Antibody - Images



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).

Phospho-Ser9 GSK3β Antibody - Background

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).

Phospho-Ser9 GSK3β Antibody - 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.