



Anti-GSK3 beta pS9 (RABBIT) Antibody - 600-401-424

Code: 600-401-424

Size: 100 µg

Product Description: Anti-GSK3 beta pS9 (RABBIT) Antibody - 600-401-424

Concentration: 1.0 mg/mL by UV absorbance at 280 nm

PhysicalState: Liquid (sterile filtered)

Label	Unconjugated
Host	Rabbit
Gene Name	GSK3B
Species Reactivity	human
Buffer	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Stabilizer	None
Preservative	0.01% (w/v) Sodium Azide
Storage Condition	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Synonyms	Glycogen Synthase Kinase 3 Beta antibody, GSK 3 beta antibody, GSK 3B antibody, GSK3B antibody, GSK3B protein antibody, GSK3beta isoform antibody
Application Note	This antibody has been tested for use in ELISA, immunohistochemistry, western blotting and immunoprecipitation. Reactivity in other immunoassays is unknown. Serum starved 293T whole cell lysate is suitable for use as a positive control. Anti-GSK 3B shows a strong signal to GSK 3B in westerns at the estimated molecular weight of 47 kD. This antibody may show very weak reactivity against GSK 3A.
Background	Glycogen synthase kinase-3 (GSK 3) is a proline-directed serine-threonine kinase that was initially identified as a phosphorylating and inactivating glycogen synthase. Two isoforms, alpha (GSK 3A) and beta, show a high degree of amino acid homology. GSK 3B is involved in energy metabolism, neuronal cell development, and body pattern formation. GSK 3B participates in the Wnt signaling pathway and has been implicated in the hormonal control of several regulatory proteins including glycogen synthase, MYB and the transcription factor JUN. GSK 3B phosphorylates JUN at sites proximal to its DNA-binding domain, thereby reducing its affinity for DNA.
Purity And Specificity	This affinity purified antibody is directed against the phosphorylated form of human GSK3B at the pS9 residue. The product was affinity purified from monospecific antiserum by immunoaffinity purification. Antiserum was first purified against the phosphorylated form of the immunizing peptide. The resultant affinity purified antibody was then cross-adsorbed against the non-phosphorylated form of the immunizing peptide. This phospho specific polyclonal antibody reacts with phosphorylated pS9 of human GSK3B. Reactivity with non-phosphorylated human GSK3B is minimal. A BLAST analysis was used to suggest reactivity with this protein from human, rat, frog, chicken, dog and zebrafish based on 100% homology for the immunogen sequence. Cross reactivity with GSK3B homologues from other sources has not been determined.
Assay Dilutions	User Optimized
ELISA	1:10,000 - 1:50,000
Immunohistochemistry	1:200 - 1:1,000
WESTERN BLOT	1:500 - 1:3,000
IHC	1:200 - 1:1,000
IFMICROSCOPY	1:200 - 1:1,000
OTHER ASSAYS	User Optimized
Expiration	Expiration date is one (1) year from date of opening.
Immunogen	This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to the aa 4-12 of human GSK3 beta.
General Reference	Stambolic V. and Woodgett J.R. (1994) Mitogen inactivation of glycogen synthase kinase-3 beta in intact cells via serine 9 phosphorylation. Biochem. J. 303:701-704.

Rhoads A.R. et al. (1999) Radiation hybrid mapping of genes in the lithium-sensitive wnt signaling pathway. Mol. Psychiatry 4:437-442.

Lau K.F. et al. (1999) Molecular cloning and characterization of the human glycogen synthase kinase-3beta promoter. Genomics 60:121-128.

Related Products

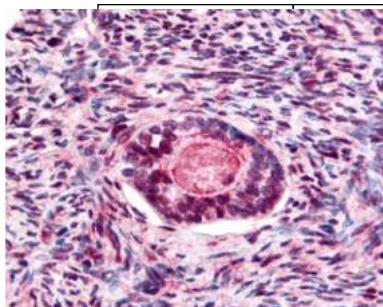
100-401-218	Anti-Erk2 (RABBIT) Antibody - 100-401-218
100-401-401	Anti-AKT (RABBIT) Antibody - 100-401-401
200-301-174	Anti-p53 (MOUSE) Monoclonal Antibody - 200-301-174
200-301-268	Anti-AKT pS473 (MOUSE) Monoclonal Antibody - 200-301-268

Related Links

NCBI	http://www.ncbi.nlm.nih.gov/protein/21361340
Gene ID	http://www.ncbi.nlm.nih.gov/nucore/225903415
UniProtKB	http://www.uniprot.org/uniprot/P49841
NCBI - 21361340	http://www.ncbi.nlm.nih.gov/protein/21361340
UniProt - P49841	http://www.uniprot.org/uniprot/P49841
Gene ID - 2932	http://www.ncbi.nlm.nih.gov/gene/2932

Images

- 1 Rabbit anti-GSK3B pS9 was used at a 1:200 dilution to detect GSK3B by immunohistochemistry in human ovarian cancer tumor tissue. Tissue was formalin-fixed and paraffin embedded. Personal Communication, Alan Yen, LifeSpanBiosciences, Seattle, WA.



- 2 Western blot using ROCKLAND Immunochemical's Rabbit-anti-GSK3B pS9 antibody at a 1:1,000 dilution. All lanes contain human 293T whole cell lysate showing a band at 47 kDa. Cells were serum starved for 24 h prior to extraction. Key: Lane 1 Control, Lane 2 treated with IGF-1 (100 ng/ml) for 20', lane 3 pre-treated with 10 uM LY294002 (selective PI3K inhibitor) and treated with IGF-1 (100 ng/ml) for 20'. Molecular weight markers confirm a MW of ~ 49 kDa. Use a 1:2,000 dilution of HRP Goat-a-Rabbit IgG (611-103-122) for detection.



Disclaimer

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