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www.rockland.com
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+1 484.791.3823

Datasheet for 600-401-424

GSK3 Beta phospho S9 Antibody

Overview

Description:	Anti-GSK3 beta pS9 (RABBIT) Antibody - 600-401-424
Item No.:	600-401-424
Size:	100 µg
Applications:	ELISA, IHC, WB
Reactivity:	Human
Host Species:	Rabbit

Product Details

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.
Synonyms:	rabbit anti-GSK3 beta pS9 antibody, rabbit anti-GSK3 ß pS9 antibody, Glycogen Synthase Kinase-3 Beta antibody, GSK-3 beta antibody, GSK 3B antibody, GSK-3B antibody, GSK3B protein antibody, GSK3beta isoform antibody, Serine/threonine-protein kinase GSK3B, phosphorylated GSK3ß
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	GSK3B
Reactivity:	Human
PTM Specificity:	Phosphorylation

Immunogen Type:	Conjugated Peptide
Immunogen:	This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic phospho-peptide corresponding to a N-Terminal region near aa 1-15 of human GSK3 beta.
Purity/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.
Relevant Links:	• NCBI - 21361340 • GeneID - 225903415 • UniProtKB - P49841 • GeneID - 2932

Application Details

Tested Applications:	ELISA, IHC, WB
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.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:10,000 - 1:50,000
IF:	1:200 - 1:1,000
IHC:	1:200 - 1:1,000
WB:	1:500 - 1:3,000

Formulation

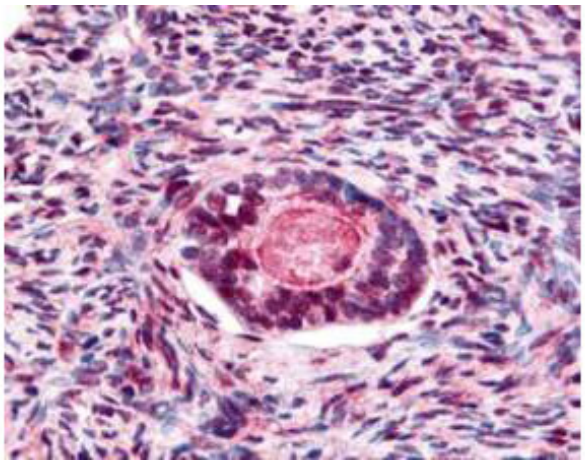
Physical State:	Liquid (sterile filtered)

Concentration:	1.0 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None

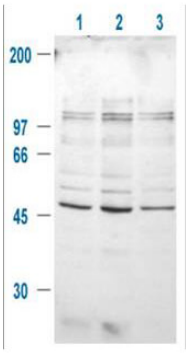
Shipping & Handling

Shipping Condition:	Dry Ice
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.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



Immunohistochemistry
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.



Western Blot

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

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.