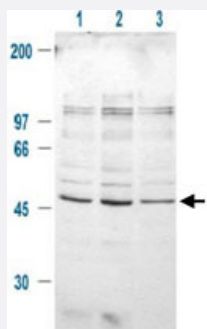


GSK3B (phospho S9) polyclonal antibody

Catalog # PAB10055

Size 100 ug

Applications



Western Blot (Cell lysate)

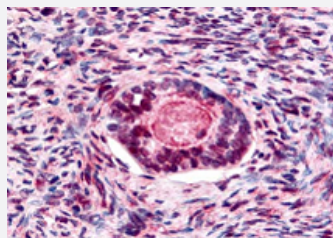
Western blot using GSK3B (phospho S9) polyclonal antibody (Cat # PAB10055) at a 1:1,000 dilution.

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 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 for detection.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunohistochemistry of GSK3B (phospho S9) polyclonal antibody (Cat # PAB10055) 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, Life Span Biosciences, Seattle, WA.

Specification

Product Description	Rabbit polyclonal antibody raised against synthetic phosphopeptide of GSK3B.
Immunogen	Synthetic phosphopeptide corresponding to residues surrounding S9 of human GSK3B.
Host	Rabbit
Reactivity	Chicken, Dog, Frog, Human, Rat

Specificity	This phospho specific polyclonal antibody reacts with phosphorylated pS9 of human GSK3B. Reactivity with non-phosphorylated human GSK3B is minimal.
Form	Liquid
Quality Control Testing	Antibody Reactive Against Synthetic Peptide.
Recommend Usage	ELISA (1:10000-1:50000) Western Blot (1:500-1:3000) Immunohistochemistry (1:200-1:1000) Immunofluorescence (1:200-1:1000) The optimal working dilution should be determined by the end user.
Storage Buffer	In 20 mM KH ₂ PO ₄ , 150 mM NaCl, pH 7.2 (0.01% sodium azide)
Storage Instruction	Store at 4°C. For long term storage store at -20°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Applications

- Western Blot (Cell lysate)

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Personal Communication, Alan Yen, Life Span Biosciences, Seattle, WA.

- Immunofluorescence

- Enzyme-linked Immunoabsorbent Assay

Gene Info — GSK3B

Entrez GeneID	2932
Protein Accession#	NM_002093(Human);P49841(Human)
Gene Name	GSK3B
Gene Alias	-
Gene Description	glycogen synthase kinase 3 beta
Omim ID	605004
Gene Ontology	Hyperlink
Gene Summary	The protein encoded by this gene is a serine-threonine kinase, belonging to the glycogen synthase kinase subfamily. It is involved in energy metabolism, neuronal cell development, and body pattern formation. Polymorphisms in this gene have been implicated in modifying risk of Parkinson disease, and studies in mice show that overexpression of this gene may be relevant to the pathogenesis of Alzheimer disease. Alternatively spliced transcript variants encoding different isoforms have been found for this gene
Other Designations	GSK3beta isoform glycogen synthase kinase-3 beta

Publication Reference

- [Insulin ameliorates dim blue light at night-induced apoptosis in hippocampal neurons via the IR/IRS1/AKT/GSK3 \$\beta\$ / \$\beta\$ -catenin signaling pathway.](#)

Qi Liu, Zixu Wang, Jing Cao, Yulan Dong, Yaoxing Chen.

Ecotoxicology and Environmental Safety 2022 Dec; 250:114488.

Application: WB-Ce, WB-Ti, Mouse, Mouse hippocampus, HT22 cells
- [A Green and Blue Monochromatic Light Combination Therapy Reduces Oxidative Stress and Enhances B-Lymphocyte Proliferation through Promoting Melatonin Secretion.](#)

Yijia Zhang, Zixu Wang, Jing Cao, Yulan Dong, Yaoxing Chen.

Oxidative Medicine and Cellular Longevity 2021 Mar; 2021:5595376.

Application: WB-Ti, Chicken, Whole bursa of Fabricius
- [The structure of phosphorylated GSK-3beta complexed with a peptide, FRATtide, that inhibits beta-catenin phosphorylation.](#)

Bax B, Carter PS, Lewis C, Guy AR, Bridges A, Tanner R, Pettman G, Mannix C, Culbert AA, Brown MJ, Smith DG, Reith AD.

Structure 2001 Dec; 9(12):1143.

- [Crystal structure of glycogen synthase kinase 3 beta: structural basis for phosphate-primed substrate specificity and autoinhibition.](#)

Dajani R, Fraser E, Roe SM, Young N, Good V, Dale TC, Pearl LH.

Cell 2001 Jun; 105(6):721.

- [Cloning and characterization of a novel human ninein protein that interacts with the glycogen synthase kinase 3beta.](#)

Hong YR, Chen CH, Chang JH, Wang S, Sy WD, Chou CK, Howng SL.

Biochimica et Biophysica Acta 2000 Jul; 1492(2-3):513.

Pathway

- [Axon guidance](#)
- [B cell receptor signaling pathway](#)
- [Basal cell carcinoma](#)
- [Cell cycle](#)
- [Chemokine signaling pathway](#)
- [Colorectal cancer](#)
- [Endometrial cancer](#)
- [ErbB signaling pathway](#)
- [Focal adhesion](#)
- [Hedgehog signaling pathway](#)
- [Insulin signaling pathway](#)
- [Melanogenesis](#)
- [Neurotrophin signaling pathway](#)
- [Pathways in cancer](#)
- [Prostate cancer](#)
- [T cell receptor signaling pathway](#)
- [Wnt signaling pathway](#)

Disease

- [Adenocarcinoma](#)
- [Alzheimer disease](#)
- [Amphetamine-Related Disorders](#)
- [Anorexia Nervosa](#)
- [Bipolar Disorder](#)
- [Bone Diseases](#)
- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Bulimia](#)
- [Cardiovascular Diseases](#)
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- [Lung Neoplasms](#)
- [Mood Disorders](#)

- [Movement Disorders](#)
- [Multiple Myeloma](#)
- [Neoplasm Invasiveness](#)
- [Parkinson disease](#)
- [Personality Disorders](#)
- [Personality Inventory](#)
- [Polycystic Ovary Syndrome](#)
- [Psychiatric Status Rating Scales](#)
- [Psychotic Disorders](#)
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- [Schizophrenia](#)
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- [Sleep Deprivation](#)
- [Stomach Neoplasms](#)
- [Urinary Bladder Neoplasms](#)
- [Weight Gain](#)
- [Werner syndrome](#)