



# GSK3 $\beta$ (Phospho Ser9) Rabbit mAb

<b>Catalog No</b>	YP-rAb-18478
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human,Mouse,Rat
<b>Applications</b>	WB,IHC,IF,ELISA
<b>Gene Name</b>	GSK3B
<b>Protein Name</b>	Glycogen synthase kinase-3 beta
<b>Purification Process</b>	Protein A
<b>Specificity</b>	This antibody detects endogenous levels of GSK3 $\beta$ only when phosphorylated at Ser9.This antibody does not recognize phosphorylated at other sites.
<b>Formulation</b>	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
<b>Source</b>	Monoclonal, Rabbit,IgG
<b>Dilution</b>	IHC 1:200-1000; WB 1:1000-5000; IF 1:200-1000; ELISA 1:5000-20000; Note: For IHC, we suggest antigen retrieval with TE buffer pH 9.0
<b>Concentration</b>	0.5 mg/ml
<b>Purity</b>	$\geq 90\%$
<b>Storage Stability</b>	-15° C to -25° C/1 year(Do not lower than -25° C)
<b>Synonyms</b>	GSK3B ; Glycogen synthase kinase-3 beta ; GSK-3 beta ; Serine/threonine-protein kinase GSK3B
<b>Observed Band</b>	46kD
<b>Calculated Molecular Weight</b>	46kD
<b>Cell Pathway</b>	Cytoplasmic, Membranous
<b>Tissue Specificity</b>	Expressed in testis, thymus, prostate and ovary and weakly expressed in lung, brain and kidney. Colocalizes with EIF2AK2/PKR and TAU in the Alzheimer disease (AD) brain.
<b>Function</b>	Catalytic activity:ATP + [tau protein] = ADP + [tau protein] phosphate.,enzyme regulation:Inhibited when phosphorylated by AKT1.,Function:Participates in the Wnt signaling pathway. Implicated in the hormonal control of several regulatory proteins including glycogen synthase, MYB and the transcription factor JUN. Phosphorylates JUN at sites proximal to its DNA-binding domain, thereby reducing its affinity for DNA. Phosphorylates MUC1 in breast cancer cells, and decreases the interaction of MUC1 with CTNNB1/beta-catenin.,PTM:Phosphorylated by AKT1 and ILK1.,similarity:Belongs to the protein kinase superfamily.,similarity:Belongs to the protein kinase superfamily. CMGC Ser/Thr protein kinase family. GSK-3





subfamily: similarity: Contains 1 protein kinase domain, subunit: Monomer (By similarity). Interacts with CABYR, MUC1, NIN and PRUNE., tissue specificity: Expressed in testis, thymus, prostate and ovary and weakly expressed in lung, brain and kidney.,

### Background

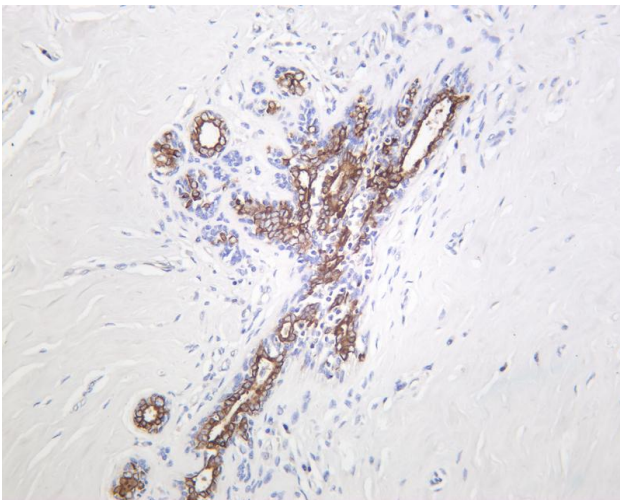
The protein encoded by this gene is a serine-threonine kinase, belonging to the glycogen synthase kinase subfamily. It is involved in energy metabolism, neuronal cell development, and body pattern formation. Polymorphisms in this gene have been implicated in modifying risk of Parkinson disease, and studies 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.[provided by RefSeq, Sep 2009],

### matters needing attention

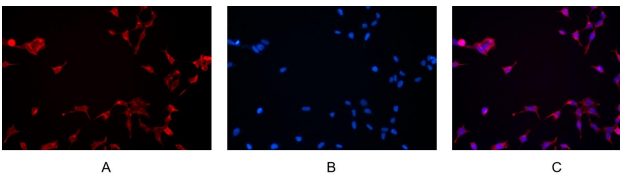
Avoid repeated freezing and thawing!

### Usage suggestions

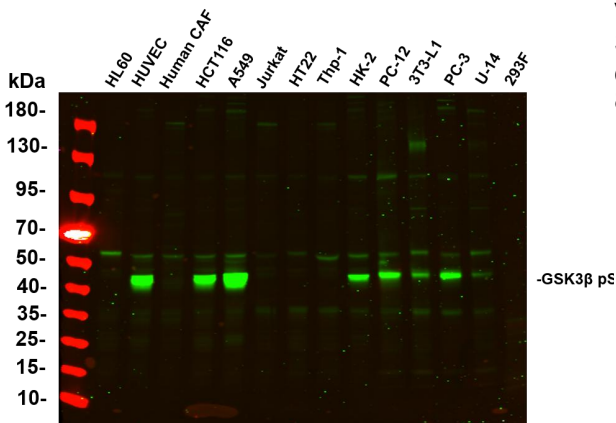
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



Human breast carcinoma was stained with Anti-GSK3 β (phospho Ser9) rabbit antibody

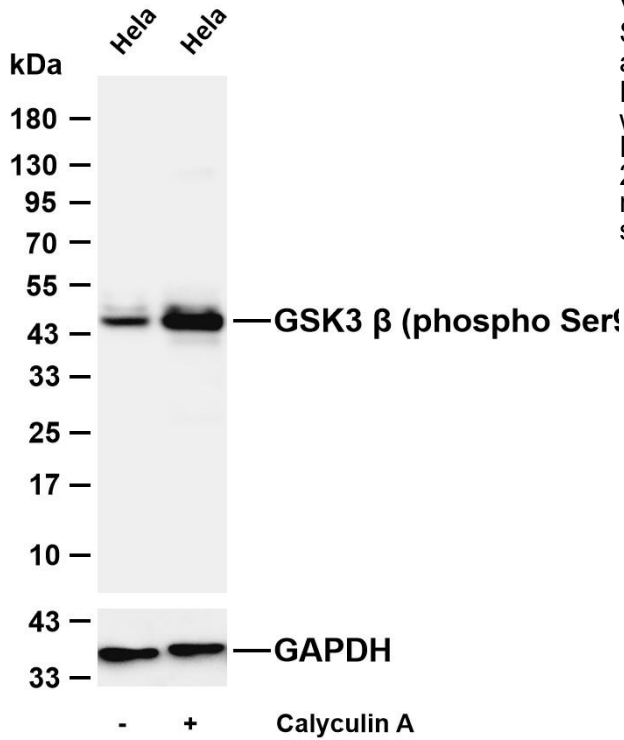


Immunofluorescence analysis of HEK293. Picture A: GSK3 β (Phospho Ser9) antibody (red). Picture B: DAPI (blue). Picture C: Merge of A+B



Various whole cell lysates were separated by 4-20% SDS-PAGE, and the primary antibody was used at 4°C, over night with a 1:2500 dilution. The Dylight 800-conjugated Goat anti-Rabbit antibody





Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-GSK3  $\beta$  (phospho Ser9) antibody. The HRP-conjugated Goat anti-Rabbit IgG (H + L) antibody was used to detect the antibody. Lane 1: HeLa Lane 2: HeLa starved of serum overnight and then treated with 20% fetal bovine serum and Calyculin A (100 nM) for 15 minutes. Predicted band size: 46kDa Observed band size: 46kDa

