



# GSK3 $\beta$ (phospho Ser9) Polyclonal Antibody

<b>Catalog No</b>	BYab-14353
<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>Immunogen</b>	Synthesized phospho-peptide around the phosphorylation site of human GSK3 $\beta$ (phospho Ser9)
<b>Specificity</b>	Phospho-GSK3 $\beta$ (S9) Polyclonal Antibody detects endogenous levels of GSK3 $\beta$ protein only when phosphorylated at S9.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source</b>	Polyclonal, Rabbit,IgG
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	WB: 1/500 - 1/2000. IHC: 1/100 - 1/300. ELISA: 1/10000.. IF 1:50-200
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	GSK3B; Glycogen synthase kinase-3 beta; GSK-3 beta; Serine/threonine-protein kinase GSK3B
<b>Observed Band</b>	47kD
<b>Cell Pathway</b>	Cytoplasm . Nucleus . Cell membrane . The phosphorylated form shows localization to cytoplasm and cell membrane (PubMed:20937854). The MEMO1-RHOA-DIAPH1 signaling pathway controls localization of the phosphorylated form to the cell membrane (PubMed:20937854). .
<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

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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

**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**

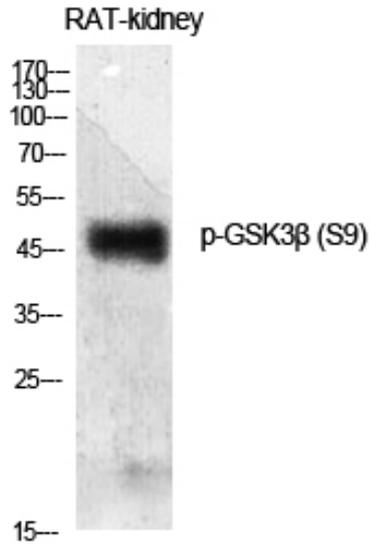
Avoid repeated freezing and thawing!

**Usage suggestions**

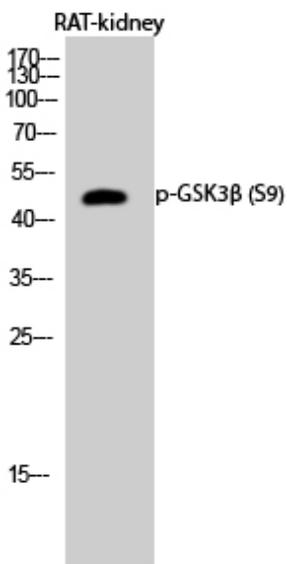
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



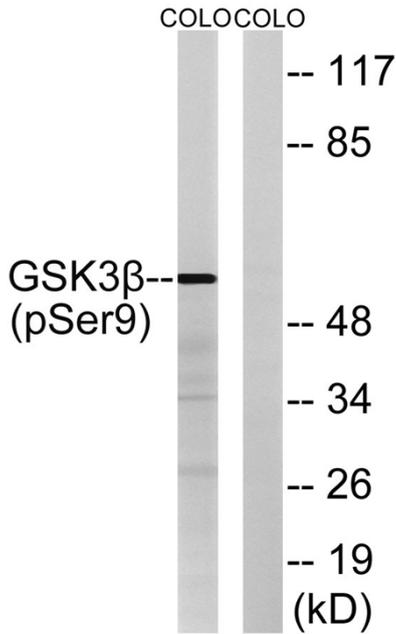
## Products Images



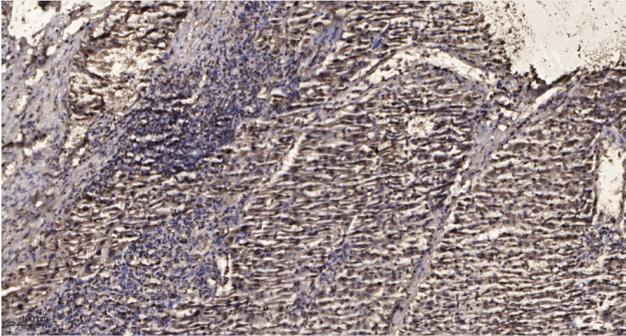
Western Blot analysis of various cells using Phospho-GSK3β (S9) Polyclonal Antibody diluted at 1:500



Western Blot analysis of RAT-kidney cells using Phospho-GSK3β (S9) Polyclonal Antibody diluted at 1:500



Western blot analysis of GSK3 $\beta$  (Phospho-Ser9) Antibody. The lane on the right is blocked with the GSK3 $\beta$  (Phospho-Ser9) peptide.



Immunohistochemical analysis of paraffin-embedded human liver cancer. 1, Antibody was diluted at 1:200(4 $^{\circ}$  overnight). 2, Tris-EDTA, pH9.0 was used for antigen retrieval. 3, Secondary antibody was diluted at 1:200(room temperature, 45min).