

# **GSK3β (Phospho Ser9) Rabbit pAb**

CatalogNo: YP0124 Orthogonal Validated 💽

Comparable Abs C

# **| Key Features**

Host Species Reactivity Applications

Rabbit
 Human, Mouse, Rat, Drosophila
 IF, WB, IHC, IP, ELISA

MW Isotype
• 48kD (Observed) • IgG

#### **Recommended Dilution Ratios**

IF 1:50-200

WB 1:500-1:2000 IHC 1:100-1:300 IP 2-5 ug/mg lysate

**ELISA 1:5000** 

Not yet tested in other applications

## Storage

Storage\* -15°C to -25°C/1 year(Do not lower than -25°C)

**Formulation** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

#### **Basic Information**

**Clonality** Polyclonal

## Immunogen Information

Immunogen The antiserum was produced against synthesized peptide derived from human GSK3

beta around the phosphorylation site of Ser9. AA range:1-50

#### **Specificity**

Phospho-GSK3B (S9) Polyclonal Antibody detects endogenous levels of GSK3B protein only when phosphorylated at S9. The name of modified sites may be influenced by many factors, such as species (the modified site was not originally found in human samples) and the change of protein sequence (the previous protein sequence is incomplete, and the protein sequence may be prolonged with the development of protein sequencing technology). When naming, we will use the "numbers" in historical reference to keep the sites consistent with the reports. The antibody binds to the following modification sequence (lowercase letters are modification sites):TTsFA

## **Target Information**

**Gene name** 

GSK3B

**Protein Name** 

Glycogen synthase kinase-3 beta

| Organism | Gene ID        | UniProt ID      |
|----------|----------------|-----------------|
| Human    | 2932;          | <u>P49841;</u>  |
| Mouse    | <u>56637</u> ; | <u>Q9WV60</u> ; |
| Rat      | <u>84027;</u>  | <u>P18266;</u>  |

#### Cellular Localization

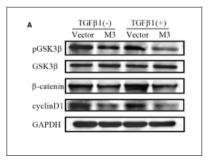
Cytoplasm . Nucleus . Cell membrane . The phosphorylated form shows localization to cytoplasm and cell membrane (PubMed:20937854). The MEMO1-RHOA-DIAPH1 signaling pathway controls localization of the phosphorylated form to the cell membrane (PubMed:20937854). .

**Tissue specificity** 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.

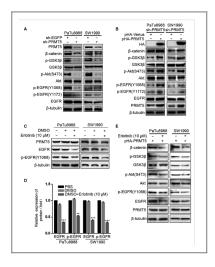
#### **Function**

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.,

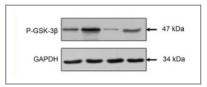
## **I** Validation Data



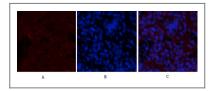
Ma, Xinqi, et al. "METTL3 attenuates proliferative vitreoretinopathy and epithelial-mesenchymal transition of retinal pigment epithelial cells via wnt/ $\beta$ -catenin pathway." Journal of Cellular and Molecular Medicine 25.9 (2021): 4220-4234.



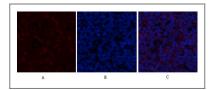
Ge, Lu, et al. "PRMT5 promotes epithelial-mesenchymal transition via EGFR- $\beta$ -catenin axis in pancreatic cancer cells." Journal of cellular and molecular medicine 24.2 (2020): 1969-1979.



Ou, Liping, et al. "Dickkopf Wnt signaling pathway inhibitor 1 regulates the differentiation of mouse embryonic stem cells in vitro and in vivo." Molecular medicine reports 13.1 (2016): 720-730.



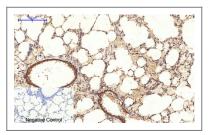
Immunofluorescence analysis of rat-spleen tissue. 1,GSK3β (phospho Ser9) Polyclonal Antibody(red) was diluted at 1:200(4°C,overnight). 2, Cy3 labled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B



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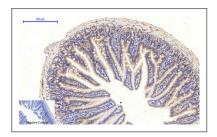
Immunohistochemical analysis of paraffin-embedded Rat-testis tissue. 1,GSK3β (phospho Ser9) Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



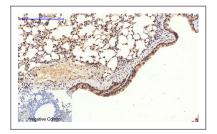
Immunohistochemical analysis of paraffin-embedded Rat-lung tissue. 1,GSK3 $\beta$  (phospho Ser9) Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



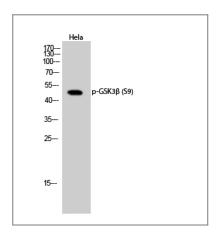
Immunohistochemical analysis of paraffin-embedded Mouse-liver tissue. 1,GSK3 $\beta$  (phospho Ser9) Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



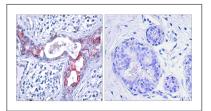
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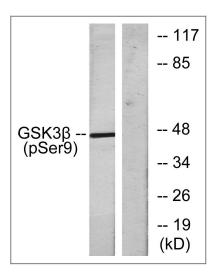
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Western Blot analysis of Hela cells using Phospho-GSK3 $\beta$  (S9) Polyclonal Antibody diluted at 1:1000



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma, using GSK3 beta (Phospho-Ser9) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from HeLa cells treated with EGF, using GSK3 beta (Phospho-Ser9) Antibody. The lane on the right is blocked with the phospho peptide.

## | Contact information

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Ser9) Rabbit pAb

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