

## GSK3 β (phospho Ser9) (PT0078R) PT® Rabbit mAb

Catalog No: YM8041

**Reactivity:** Human; Mouse;

**Applications:** WB;IHC;IF;IP;ELISA

Target: GSK3β

**Fields:** >>EGFR tyrosine kinase inhibitor resistance;>>ErbB signaling

pathway;>>Chemokine signaling pathway;>>Cell cycle;>>mTOR signaling pathway;>>PI3K-Akt signaling pathway;>>Wnt signaling pathway;>>Hedgehog signaling pathway;>>Axon guidance;>>Hippo signaling pathway;>>Focal adhesion;>>Signaling pathways regulating pluripotency of stem cells;>>IL-17 signaling pathway;>>T cell receptor signaling pathway;>>B cell receptor signaling pathway;>>Neurotrophin signaling pathway;>>Dopaminergic synapse;>>Insulin signaling pathway;>>Melanogenesis;>>Prolactin signaling pathway;>>Thyroid hormone signaling pathway;>>Insulin resistance;>>Non-alcoholic fatty liver disease;>>Cushing syndrome;>>Growth hormone synthesis, secretion and

action;>>Alcoholic liver disease;>>Alzheimer disease;>>Prion

disease;>>Pathways of neurodegeneration - multiple

diseases;>>Shigellosis;>>Yersinia infection;>>Hepatitis C;>>Measles;>>Human cytomegalovirus infection;>>Human papillomavirus infection;>>Kaposi sarcoma-

associated herpes

Gene Name: GSK3B

**Protein Name:** Glycogen synthase kinase-3 beta

Q9WV60

Human Gene Id: 2932

**Human Swiss Prot** P49841

No:

Mouse Gene Id: 56637

**Mouse Swiss Prot** 

No:

Rat Gene Id: 84027

Rat Swiss Prot No: P18266

1/3



**Specificity:** endogenous

Formulation: PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA

**Source :** Monoclonal, rabbit, IgG, Kappa

**Dilution:** IHC 1:200-1000,WB 1:1000-5000,IF 1:200-1000,ELISA 1:5000-20000,IP

1:50-200

Purification : Protein A

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

Molecularweight: 46kD

Observed Band: 46kD

**Cell Pathway:** ErbB\_HER;Chemokine;Cell\_Cycle\_G1S;Cell\_Cycle\_G2M\_DNA;WNT;WNT-T

CELLHedgehog; Axon guidance; Focal adhesion; T Cell Receptor; B Cell Antigen

;Neurotrophin;Insulin Receptor;Melanogenesis;Alzheimer's disease;

**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],

**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

Subcellular Location:

Cytoplasmic, Membranous

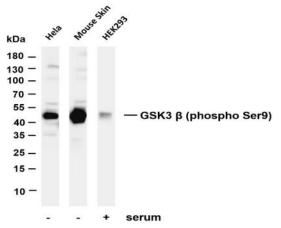
**Expression:** Expressed in testis, thymus, prostate and ovary and weakly expressed in lung,

brain and kidney. Colocalizes with EIF2AK2/PKR and TAU in the Alzheimer

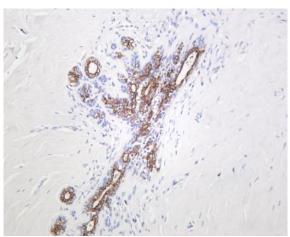


disease (AD) brain.

## **Products Images**



Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-GSK3  $\beta$  (phospho Ser9) (PT0078R) antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: Hela Lane 2: Mouse skin Lane 3: HEK293 treated with serum in 30 minutes Predicted band size: 46kDa Observed band size: 46kDa



Human breast carcinoma was stained with Anti-GSK3  $\beta$  (phospho Ser9) (PT0078R) rabbit antibody