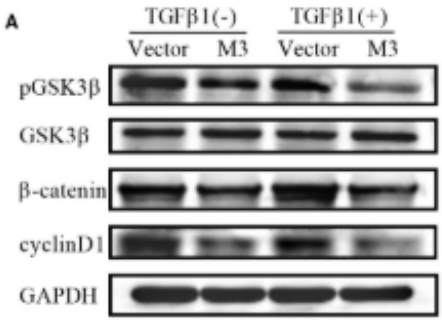
GSK3β (phospho Ser9) Polyclonal Antibody

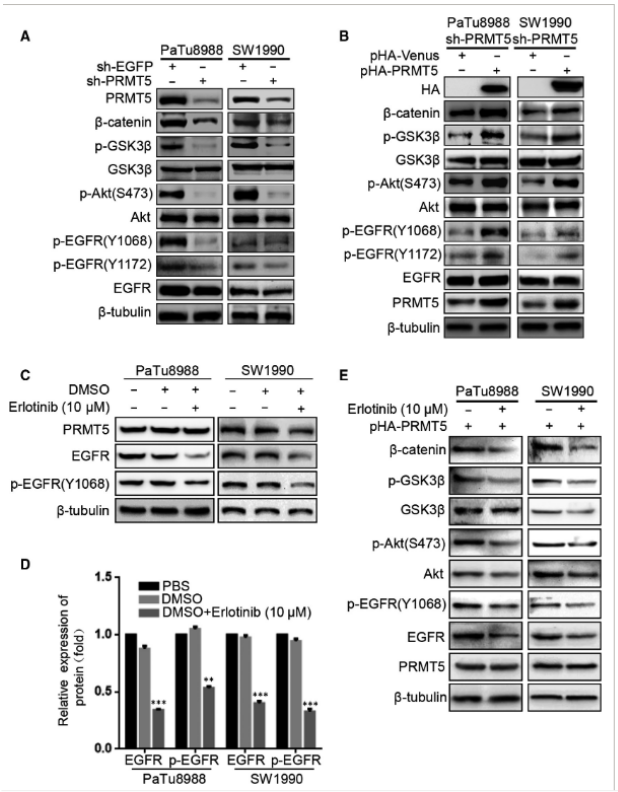
Catalog No	BYab-14311
Isotype	IgG
Reactivity	Human;Mouse;Rat;Drosophila
Applications	IF;WB;IHC;IP;ELISA
Gene Name	GSK3B
Protein Name	Glycogen synthase kinase-3 beta
Immunogen	The antiserum was produced against synthesized peptide derived from human GSK3 beta around the phosphorylation site of Ser9. AA range:1-50
Specificity	Phospho-GSK3β (S9) Polyclonal Antibody detects endogenous levels of GSK3β protein only when phosphorylated at S9.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	IF: 1:50-200 Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunoprecipitation: 2-5 ug/mg lysate. ELISA: 1/5000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	GSK3B; Glycogen synthase kinase-3 beta; GSK-3 beta; Serine/threonine-protein kinase GSK3B
Observed Band	48kD
Cell Pathway	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
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.

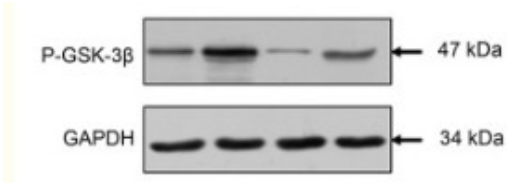
Products Images



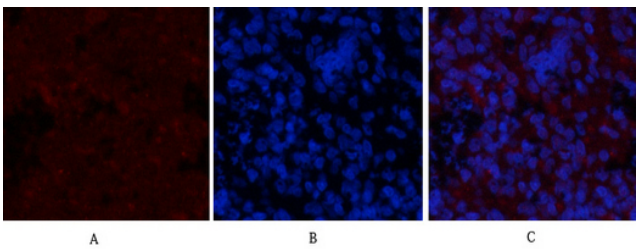
Ma, Xinqi, et al. "METTL3 attenuates proliferative vitreoretinopathy and epithelial-mesenchymal transition of retinal pigment epithelial cells via wnt/β-catenin pathway." Journal of Cellular and Molecular Medicine 25.9 (2021): 4220-4234.



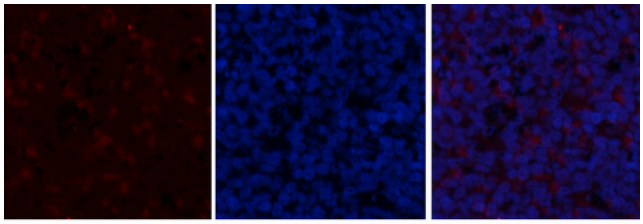
Ge, Lu, et al. "PRMT5 promotes epithelial-mesenchymal transition via EGFR-β-catenin axis in pancreatic cancer cells." Journal of cellular and molecular medicine 24.2 (2020): 1969-1979.



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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