



GSK3 β mouse mAb

Catalog No	YP-Ab-14212
Isotype	IgG
Reactivity	Human;Mouse
Applications	WB;IF;IP
Gene Name	gsk-3 beta
Immunogen	Purified recombinant GSK-3 β protein fragments expressed in E.coli.
Specificity	This antibody detects endogenous levels of GSK-3 β and does not cross-react with related proteins.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse
Purification	The antibody was affinity-purified from mouse ascites by affinity-chromatography using epitope-specific immunogen.
Dilution	wb 1:1000 icc 1:200. IF 1:50-200
Concentration	1 mg/ml
Purity	$\geq 90\%$
Storage Stability	-20°C/1 year
Synonyms	GSK3 beta;EC:2.7.11.1;EC:2.7.11.26;GSK 3 beta;GSK-3 beta;GSK3 β ;Glycogen Synthase Kinase 3 Beta;Glycogen synthase kinase-3 beta;GSK3B;GSK3B_HUMAN;GSK3beta isoform;Serine/threonine-protein kinase GSK3B.
Observed Band	46kD
Calculated Molecular Weight	46kD
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

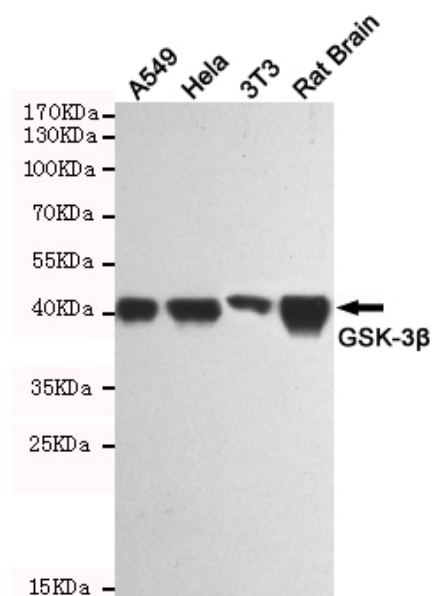
Avoid repeated freezing and thawing!

Usage suggestions

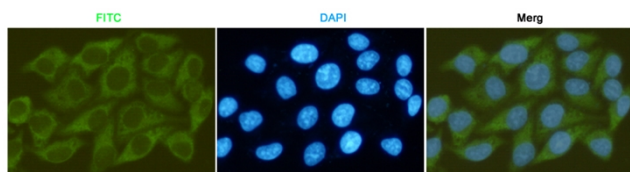
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



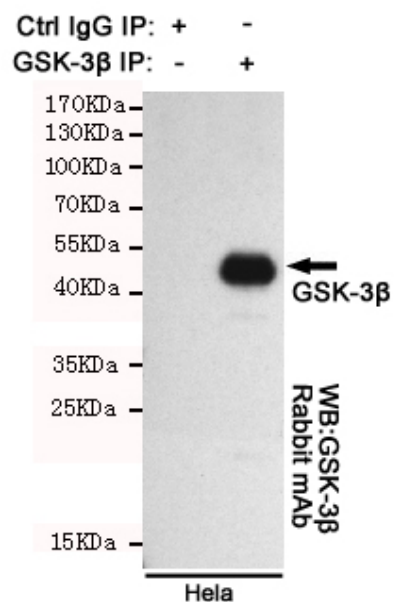
Products Images



Western blot analysis of extracts from A549, HeLa, 3T3 and Rat Brain cell lysates using GSK-3 β mouse mAb (1:1000 diluted). Predicted band size: 46KDa. Observed band size: 46KDa.



Immunocytochemistry staining of HeLa cells fixed with -20°C Methanol and using GSK-3 β mouse mAb (dilution 1:200).



Immunoprecipitation analysis of HeLa cell lysates using GSK-3 β . GSK-3 β Rabbit mAb was used for the western blot analysis (1:1000 diluted).