GSK3α/β (PTR2350) Mouse mAb

CatalogNo: YM4732

Key Features

Host Species
- Mouse

Reactivity
- Human,Mouse,Rat,

Applications
- WB,IF,ELISA

MW
- 42kD (Observed)

Isotype
- IgG3,Kappa

Recommended Dilution Ratios

WB 1:500-2000
IF 1:100-500
ELISA 1:1000-5000

Storage

Storage*	-15°C to -25°C/1 year(Do not lower than -25°C)
Formulation	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA

Basic Information

Clonality	Monoclonal
Clone Number	PTR2350

Immunogen Information

Immunogen	Synthesized peptide derived from human GSK3α/β AA range: 200-300
Specificity	This antibody detects endogenous levels of GSK3α/β protein.

Target Information

Gene name GSK3A GSK3B

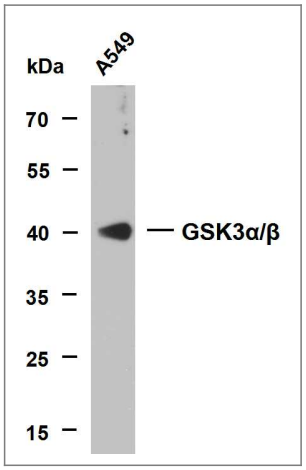
Protein Name Glycogen synthase kinase-3 alpha (GSK-3 alpha) (Serine/threonine-protein kinase GSK3A) GSK3α;GSK3 A; GSK3 B; GSK3 alphal; GSK3 beta; GSK3 β ;GSK3β

Organism	Gene ID	UniProt ID
Human	2931;	P49840; P49841;
Mouse	606496;	Q2NL51;

Cellular Localization apical dendrite;axon;beta-catenin destruction complex;cytoplasm;cytosol;mitochondrion;neuronal cell body;nucleus;postsynapse;proximal dendrite;

Function Constitutively active protein kinase that acts as a negative regulator in the hormonal control of glucose homeostasis, Wnt signaling and regulation of transcription factors and microtubules, by phosphorylating and inactivating glycogen synthase (GYS1 or GYS2), CTNNB1/beta-catenin, APC and AXIN1 . Requires primed phosphorylation of the majority of its substrates . Contributes to insulin regulation of glycogen synthesis by phosphorylating and inhibiting GYS1 activity and hence glycogen synthesis . Regulates glycogen metabolism in liver, but not in muscle (By similarity). May also mediate the development of insulin resistance by regulating activation of transcription factors . In Wnt signaling, regulates the level and transcriptional activity of nuclear CTNNB1/beta-catenin . Facilitates amyloid precursor protein (APP) processing and the generation of APP-derived amyloid plaques found in Alzheimer disease . May be involved in the regulation of replication in pancreatic beta-cells (By similarity). Is necessary for the establishment of neuronal polarity and axon outgrowth (By similarity). Through phosphorylation of the anti-apoptotic protein MCL1, may control cell apoptosis in response to growth factors deprivation (By similarity). Acts as a regulator of autophagy by mediating phosphorylation of KAT5/TIP60 under starvation conditions which activates KAT5/TIP60 acetyltransferase activity and promotes acetylation of key autophagy regulators, such as ULK1 and RUBCNL/Pacer . Negatively regulates extrinsic apoptotic signaling pathway via death domain receptors. Promotes the formation of an anti-apoptotic complex, made of DDX3X, BRIC2 and GSK3B, at death receptors, including TNFRSF10B. The anti-apoptotic function is most effective with weak apoptotic signals and can be overcome by stronger stimulation (By similarity). Phosphorylates mTORC2 complex component RICTOR at 'Thr-1695' which facilitates FBXW7-mediated ubiquitination and subsequent degradation of RICTOR .

Validation Data



Whole cell lysates were separated by 10% SDS-PAGE, and the membrane was blotted with anti-GSK3α/β(PTR2350) antibody. The HRP-conjugated Goat anti-Mouse IgG(H + L) antibody was used to detect the antibody. Lane 1: A549

Contact information

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Please scan the QR code to access additional product information:
GSK3α/β (PTR2350) Mouse mAb