

Anti-Phospho-GSK3 (alpha + beta) (Y216 + Y279) GSK3A Rabbit Monoclonal Antibody Catalog # ABO13211

Specification

Anti-Phospho-GSK3 (alpha + beta) (Y216 + Y279) GSK3A Rabbit Monoclonal Antibody - Product Information

Application	WB, IHC, IF, ICC, IP
Primary Accession	P49840
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Format	Liquid

Description

Anti-Phospho-GSK3 (alpha + beta) (Y216 + Y279) GSK3A Rabbit Monoclonal Antibody . Tested in WB, IHC, ICC/IF, IP applications. This antibody reacts with Human, Mouse, Rat.

Anti-Phospho-GSK3 (alpha + beta) (Y216 + Y279) GSK3A Rabbit Monoclonal Antibody - Additional Information

Gene ID 2931

Other Names

Glycogen synthase kinase-3 alpha, GSK-3 alpha, 2.7.11.26, Serine/threonine-protein kinase GSK3A, 2.7.11.1, GSK3A

Calculated MW

50981 MW KDa

Application Details

WB 1:500-1:2000
IHC 1:50-1:200
ICC/IF 1:50-1:200
IP 1:50

Contents

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

Immunogen

A synthesized peptide derived from human Phospho-GSK3 (alpha + beta) (Y216 + Y279)

Purification

Affinity-chromatography

Storage

Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

Anti-Phospho-GSK3 (alpha + beta) (Y216 + Y279) GSK3A Rabbit Monoclonal Antibody - Protein Information

Name GSK3A

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 (PubMed: [11749387](http://www.uniprot.org/citations/11749387)), PubMed: [17478001](http://www.uniprot.org/citations/17478001)), PubMed: [19366350](http://www.uniprot.org/citations/19366350)). Requires primed phosphorylation of the majority of its substrates (PubMed: [11749387](http://www.uniprot.org/citations/11749387)), PubMed: [17478001](http://www.uniprot.org/citations/17478001)), PubMed: [19366350](http://www.uniprot.org/citations/19366350)). Contributes to insulin regulation of glycogen synthesis by phosphorylating and inhibiting GYS1 activity and hence glycogen synthesis (PubMed: [11749387](http://www.uniprot.org/citations/11749387)), PubMed: [17478001](http://www.uniprot.org/citations/17478001)), PubMed: [19366350](http://www.uniprot.org/citations/19366350)). 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 (PubMed: [10868943](http://www.uniprot.org/citations/10868943)), PubMed: [17478001](http://www.uniprot.org/citations/17478001)). In Wnt signaling, regulates the level and transcriptional activity of nuclear CTNNB1/beta-catenin (PubMed: [17229088](http://www.uniprot.org/citations/17229088)). Facilitates amyloid precursor protein (APP) processing and the generation of APP-derived amyloid plaques found in Alzheimer disease (PubMed: [12761548](http://www.uniprot.org/citations/12761548)). 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 (PubMed: [30704899](http://www.uniprot.org/citations/30704899)). 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 (PubMed: [25897075](http://www.uniprot.org/citations/25897075)).

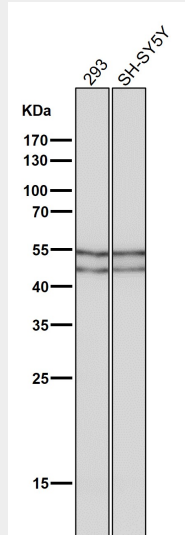
Anti-Phospho-GSK3 (alpha + beta) (Y216 + Y279) GSK3A Rabbit Monoclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

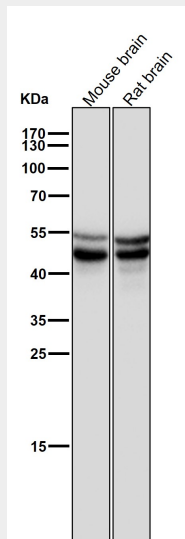
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)

- [Cell Culture](#)

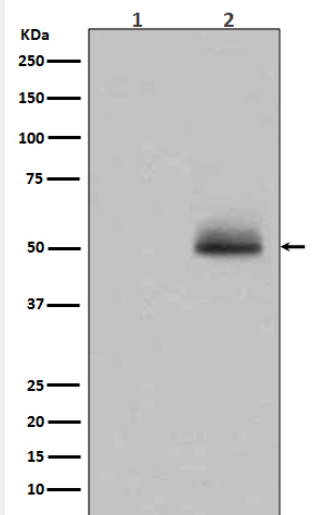
Anti-Phospho-GSK3 (alpha + beta) (Y216 + Y279) GSK3A Rabbit Monoclonal Antibody - Images



All lanes use the Antibody at 1:1K dilution for 1 hour at room temperature.



All lanes use the Antibody at 1:1K dilution for 1 hour at room temperature.



Western blot analysis of GSK3 alpha/ beta phosphorylation expression in 293 cell lysate treated with AP.