

**Phospho-GSK3 (alpha + beta)(Tyr216/Tyr279) Rabbit mAb**  
Catalog # AP78897**Specification****Phospho-GSK3 (alpha + beta)(Tyr216/Tyr279) Rabbit mAb - Product Information**

Application	WB
Primary Accession	<a href="#">P49840</a>
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Monoclonal Antibody
Calculated MW	50981

**Phospho-GSK3 (alpha + beta)(Tyr216/Tyr279) Rabbit mAb - Additional Information**

Gene ID 2931

**Other Names**

GSK3A

**Dilution**

WB~~1/500-1/1000

**Format**

Liquid

**Phospho-GSK3 (alpha + beta)(Tyr216/Tyr279) Rabbit mAb - 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: [10868943](http://www.uniprot.org/citations/10868943)).

href="http://www.uniprot.org/citations/17478001" target="\_blank">17478001</a>). In Wnt signaling, regulates the level and transcriptional activity of nuclear CTNNB1/beta-catenin (PubMed:<a href="http://www.uniprot.org/citations/17229088" target="\_blank">17229088</a>). Facilitates amyloid precursor protein (APP) processing and the generation of APP-derived amyloid plaques found in Alzheimer disease (PubMed:<a href="http://www.uniprot.org/citations/12761548" target="\_blank">12761548</a>). 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:<a href="http://www.uniprot.org/citations/30704899" target="\_blank">30704899</a>). 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:<a href="http://www.uniprot.org/citations/25897075" target="\_blank">25897075</a>).

### Phospho-GSK3 (alpha + beta)(Tyr216/Tyr279) Rabbit mAb - 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](#)

### Phospho-GSK3 (alpha + beta)(Tyr216/Tyr279) Rabbit mAb - Images

