

## Anti-Phospho-GSK3 (Tyr216/Tyr279) Rabbit Monoclonal Antibody

## Introduction

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. 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. Is necessary for the establishment of neuronal polarity and axon outgrowth. Through phosphorylation of the anti-apoptotic protein MCL1, may control cell apoptosis in response to growth factors deprivation.

## Product parameters

Alternative Names	Serine/threonine-protein kinase GSK3A; Serine/threonine-protein kinase GSK3B
Gene ID	2931/2932
Gene Name	GSK3A/GSK3B
SwissProt ID	P49840/P49841
Host	Rabbit
Reactivity	Mouse, Rat
Molecular Weight	Calculated MW: 51 kDa; Observed MW: 47-51 kDa
Conjugation	Unconjugated
Ex	-
Em	-
Modification	Phosphorylated
C <mark>lonal</mark> ity	IgG5 (O)
Isotype	Monoclonal Antibody
Clonality No.	AP-11A5B1
Form	Liquid
Concentration	See label
Carrier	Carrier Not Free

Immunogen	A synthetic phosphopeptide corresponding to residues surrounding Tyr216 of human GSK3 alpha
Purification	Affinity Purified
Buffer System	50mM Tris-Glycine (pH 7.4), 0.15M NaCl, 40% Glycerol, 0.01% Sodium azide and 0.05% BSA.
Application	WB, IP
Dilution Ratio	WB: 1/500-1/1000 IP: 1/20
Research Field	Neuroscience
Produ <mark>ct Cat</mark> egories	Primary antibody A P Ex B 10
Shipping	Blue ice
Storage	-20°C
Expiration Date	12 months
Note	Please avoid freeze-thaw cycles.

## Protocol

Configure the product according to the application range and recommended dilution ratio.

\*Note: The primary antibody dilution buffer options: WB - Primary Antibody Dilution Buffer (Cat. #: K1200, Not for HRP/AP conjugated antibodies), Immunostaining - Immunol Staining Primary Antibody Dilution Solution (Cat. #: K4655).





1. This product is for scientific research use only.













