

## Product datasheet for **TA384339M**

### **GSK3 alpha (GSK3A) Rabbit Monoclonal Antibody [Clone ID: R01-5G6]**

#### **Product data:**

Product Type:	Primary Antibodies
Clone Name:	R01-5G6
Applications:	IP, WB
Recommended Dilution:	WB: 1/1000 IP: 1/20
Reactivity:	Mouse, Rat
Host:	Rabbit
Isotype:	IgG
Clonality:	Monoclonal
Immunogen:	A synthetic phosphopeptide corresponding to residues surrounding Tyr216 of human GSK3 alpha (Phosphorylated)
Formulation:	50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40% Glycerol, 0.01% Sodium azide and 0.05% BSA
Concentration:	lot specific
Purification:	Affinity Purified
Conjugation:	Unconjugated
Storage:	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Stability:	1 year
Predicted Protein Size:	Calculated MW: 51,47 kDa; Observed MW: 47-51 kDa
Gene Name:	glycogen synthase kinase 3 alpha
Database Link:	<a href="#">P49840</a>

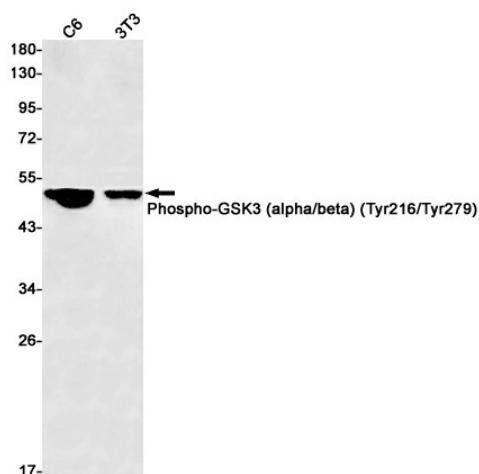
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**Background:**

Swiss-Prot Acc.P49840.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.

**Synonyms:**

DKFZp686D0638; OTTHUMP00000198368

**Product images:**


Western blot detection of Phospho-GSK3 (alpha/beta) (Tyr216/Tyr279) in C6,3T3 cell lysates using Phospho-GSK3 (alpha/beta) (Tyr216/Tyr279) Rabbit mAb(1:1000 diluted).Predicted band size:51,47kDa.Observed band size:47-51kDa.