

Product name:	GSK3 alpha Mouse Monoclonal Antibody
Cat number:	MABN80591
Conjugate:	Unconjugated
Size:	100µL
Clone:	Monoclonal
Concentration:	1mg/ml
Host:	Mouse
Isotype:	Mouse IgG1
Immunogen:	Purified recombinant fragment of GSK3 alpha expressed in E. Coli.
Reactivity:	Human
Applications:	WB 1:500-1:2000, ICC 1:200-1:1000, ELISA 1:5000-1:20000
Molecular Weight:	51kDa
Purification:	Affinity Purification
Form:	Liquid
Buffer:	Ascitic fluid containing 0.03% sodium azide.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.
Background:	Glycogen synthase kinase 3 alpha belongs to the Ser/Thr family of protein kinases, Cdc2/cdkx subfamily; GSK3 subsubfamily. It is implicated in the hormonal control of several regulatory proteins including glycogen synthase, myb, and the transcription factor c jun. GSK3 phosphorylates glycogen synthase and thereby inactivates it. Insulin stimulates the dephosphorylation of glycogen synthase at the sites phosphorylated by GSK3 and subsequently inhibits GSK3 acutely leading to the stimulation of glycogen synthesis. GSK3 signaling is performed by two isoforms, GSK3 alpha and GSK3 beta. The two isoforms share 97% sequence similarity within their catalytic domains. GSK3 has also been shown to play a role in protein synthesis, cell adhesion, cell proliferation, cell differentiation, microtubule dynamics and cell motility.