OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for TA389145

Phospho-GSK3A (pTyr216) Mouse Antibody [Clone ID: M132]

Product data:

Product Type:	Primary Antibodies
Clone Name:	M132
Applications:	WB
Recommended Dilution:	**WB**: 1:1000
Reactivity:	Human, Rat, Mouse
Host:	Mouse
Isotype:	IgG1
Immunogen:	Clone M132 was generated from a phospho-GSK-3β (Tyr-216) synthetic peptide (coupled to KLH) corresponding to amino acid residues around tyrosine 216 of human GSK-3β. This peptide sequence is also found in GSK-3α (Tyr-279) and is highly conserved in GSK-3 genes in rat and mouse.
Specificity:	The antibody detects 46/50 kDa* proteins corresponding to the apparent molecular mass of GSK-3β and GSK-3α on SDS-PAGE immunoblots of pervanadate treated rabbit fibroblasts, as well as treated human SKN-SH and A431 cells.
Formulation:	PBS + 1 mg/ml BSA, 0.05% NaN3 and 50% glycerol
Concentration:	lot specific
Purification:	Protein A Purified
Conjugation:	Unconjugated
Storage:	Storage at -20°C is recommended, as aliquots may be taken without freeze/thawing due to presence of 50% glycerol. Stable for at least 1 year at -20°C.
Stability:	After date of receipt, stable for at least 1 year at -20°C.
Predicted Protein Size:	46/50
Database Link:	P49840

View online »

Background: Glycogen synthase kinase-3 (GSK-3) has been implicated in fundamental cell processes such as cell fate determination, metabolism, transcriptional control, and oncogenesis. Two GSK-3 genes (α and β) have been cloned in mammals and these kinase homologues show strong sequence conservation within their catalytic domain. GSK-3β plays a critical role in cell survival by phosphorylating nuclear factor-κB (NF-κB) p65 subunit, leading to NF-κB transactivation in hepatocytes. Phosphorylation regulates the activity of both GSK-3 genes. MEK1/2 can phosphorylate tyrosine 216 (tyrosine 279 in GSK-3α), which stimulates GSK-3 kinase activity. Tyr-216 phosphorylation is required for GSK-mediated down-regulation of β-catenin activity. Also, TRAIL stimulation can increase Tyr-216 phosphorylation, and GSK-3β activity may suppress TRAIL-induced apoptosis. Inactiviation of GSK-3 occurs through Akt phosphorylation of serine 9 of GSK-3β (Serine 21 in GSK-3α). This phosphorylation may be involved in later phases of neuronal apoptosis.

Note: Protein G purified tissue culture supernatant.