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Mouse Gsk3a Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP14846b

Specification

Mouse Gsk3a Antibody (C-term) - Product Information

Application	**WB, IHC-P,E**
Primary Accession	Q2NL51
Other Accession	NP_001026837.1
Reactivity	**Mouse**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit Ig**
Calculated MW	**51661**
Antigen Region	**348-376**

Mouse Gsk3a Antibody (C-term) - Additional Information

Gene ID 606496

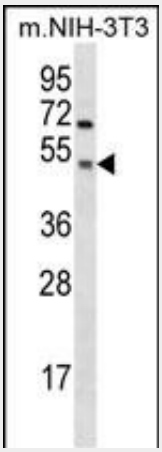
Other Names
Glycogen synthase kinase-3 alpha, GSK-3 alpha, Serine/threonine-protein kinase GSK3A, Gsk3a

Target/Specificity
This Mouse Gsk3a antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 348-376 amino acids from the C-terminal region of mouse Gsk3a.

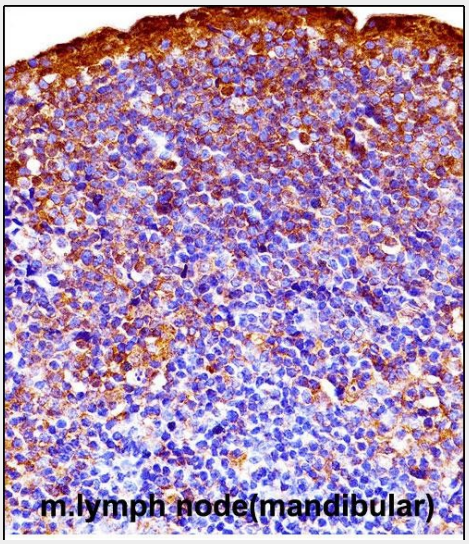
Dilution
WB~~1:1000
IHC-P~~1:10~50

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.



Mouse Gsk3a Antibody (C-term) (Cat. #AP14846b) western blot analysis in mouse NIH-3T3 cell line lysates (35ug/lane).This demonstrates the Gsk3a antibody detected the Gsk3a protein (arrow).



Mouse Gsk3a Antibody (C-term) (AP14846b)immunohistochemistry analysis in formalin fixed and paraffin embedded mouse lymph node(mandibular) followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of Mouse Gsk3a Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.

Precautions
Mouse Gsk3a Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Mouse Gsk3a Antibody (C-term) - 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:15791206, PubMed:17908561). Requires primed phosphorylation of the majority of its substrates (PubMed:22539723). Contributes to insulin regulation of glycogen synthesis by phosphorylating and inhibiting GYS1 activity and hence glycogen synthesis (PubMed:15791206, PubMed:17908561). Regulates glycogen metabolism in liver, but not in muscle (PubMed:17908561). May also mediate the development of insulin resistance by regulating activation of transcription factors (By similarity). In Wnt signaling, regulates the level and transcriptional activity of nuclear CTNNB1/beta-catenin (PubMed:15791206). Facilitates amyloid precursor protein (APP) processing and the generation of APP-derived amyloid plaques found in Alzheimer disease (By similarity). May be involved in the regulation of replication in pancreatic beta-cells (By similarity). Is

Mouse Gsk3a Antibody (C-term) - Background

Implicated in the hormonal control of several regulatory proteins including glycogen synthase, MYB and the transcription factor JUN (By similarity).

Mouse Gsk3a Antibody (C-term) - References

Ahmad, I., et al. Oncogene (2010) In press :
Beurel, E., et al. Neuroscience 169(3):1063-1070(2010)
Zhou, J., et al. J. Clin. Invest. 120(7):2280-2291(2010)
Wang, Z., et al. Cancer Cell 17(6):597-608(2010)
Spokoini, R., et al. Mol. Endocrinol. 24(6):1136-1150(2010)

necessary for the establishment of neuronal polarity and axon outgrowth (PubMed:17391670). Through phosphorylation of the anti-apoptotic protein MCL1, may control cell apoptosis in response to growth factors deprivation (PubMed:16543145). Acts as a regulator of autophagy by mediating phosphorylation of KAT5/TIP60 under starvation conditions, leading to activate KAT5/TIP60 acetyltransferase activity and promote acetylation of key autophagy regulators, such as ULK1 and RUBCNL/Pacer (PubMed:22539723). 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).

Mouse Gsk3a Antibody (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture