

Anti-GSK-3ß (N-terminal region) Antibody

Catalog # AN1806

Specification

Anti-GSK-3ß (N-terminal region) Antibody - Product Information

Application WB, IHC
Primary Accession P49841
Reactivity Bovine
Host Mouse

Clonality Mouse Monoclonal

Isotype IgG1
Calculated MW 46744

Anti-GSK-3ß (N-terminal region) Antibody - Additional Information

Gene ID 2932

Other Names

Glycogen synthase kinase beta3

Target/Specificity

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-3 β plays a critical role in cell survival by phosphorylating nuclear factor-kB (NF-kB) p65 subunit, leading to NF-kB transactivation in hepatocytes. Phosphorylation regulates the activity of both GSK-3 genes. MEK1/2 can phosphorylate tyrosine 216 (tyrosine 279 in GSK-3 α), 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-3 β activity may suppress TRAIL-induced apoptosis. Inactiviation of GSK-3 occurs through Akt phosphorylation of serine 9 of GSK-3 β (Serine 21 in GSK-3 α). This phosphorylation may be involved in later phases of neuronal apoptosis.

Dilution

WB~~1:1000 IHC~~1:100~500

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Anti-GSK- 3β (N-terminal region) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Shipping

Blue Ice

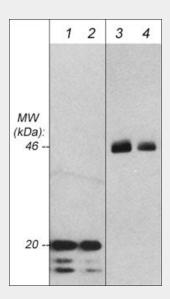


Anti-GSK-3ß (N-terminal region) Antibody - Protocols

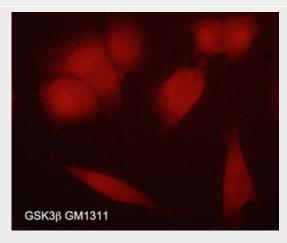
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

Anti-GSK-3β (N-terminal region) Antibody - Images



Western blot analysis of a human recombinant GSK3 β N-terminal fragment (lanes 1 & 2) and endogenous GSK3 β expressed in mouse brain (lanes 3 & 4). The blot was probed with mouse monoclonal anti-GSK-3 β at 1:500 (lanes 1 & 3) and 1:2000 (lanes 2 & 4).



Immunocytochemical labeling of GSK3 β in aldehyde-fixed and NP-40 permeabilized human NCI-H1915 lung carcinoma cells. The cells were labeled with mouse monoclonal anti-GSK3 β (GM1311) antibody. The antibody was detected using appropriate secondary antibody conjugated to DyLight® 594.

Anti-GSK-3ß (N-terminal region) Antibody - Background





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