

Product Name: GSK3B Mouse Monoclonal Antibody
Catalog #: AMM80814



Summary

Production Name	GSK3B Mouse Monoclonal Antibody
Description	Mouse Monoclonal Antibody
Host	Mouse
Application	WB,IHC,ICC,FC,ELISA
Reactivity	Human,Mouse,Rat,Monkey

Performance

Conjugation	Unconjugated
Modification	Unmodified
Isotype	Mouse IgG2a
Clonality	Monoclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Purified antibody in PBS with 0.05% sodium azide.
Purification	Affinity Purification

Immunogen

Gene Name	GSK3B
Alternative Names	GSK-3 β ; GSK3-beta
Gene ID	2932.0
SwissProt ID	P49841.Purified recombinant fragment of human GSK3B expressed in E. Coli.

Application

Dilution Ratio	WB:1:500-1:2000,IHC:1:200-1:1000,ICC:1:200-1:1000,FC:1:200-1:400,ELISA:1:10000
Molecular Weight	46kDa

Background

Glycogen synthase kinase 3 (GSK-3), a serine-threonine kinase with two isoforms (alpha and beta), was originally

Product Name: GSK3B Mouse Monoclonal Antibody
Catalog #: AMM80814

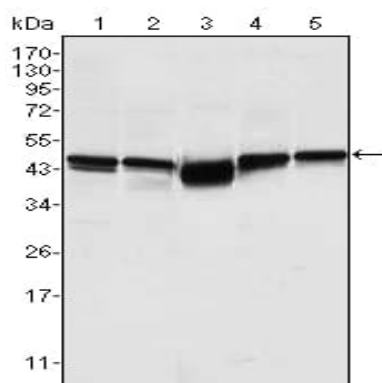


discovered as a key enzyme in glycogen metabolism. GSK-3 was subsequently shown to function in cell division, proliferation, motility and survival. GSK-3 plays a role in a number of pathological conditions including cancer and diabetes and is increasingly seen as an important component of neurological diseases. GSK-3 phosphorylates tau and presenilin-1, which are involved in the development of Alzheimer's disease. Both isoforms of GSK-3 are ubiquitously expressed, although particularly high levels of GSK-3beta are found in the brain where it is involved in synaptic plasticity, possibly via regulation of NMDA receptor trafficking. GSK-3 phosphorylates over 40 different substrates including signaling proteins, transcription factors and structural proteins, and is part of the signal transduction cascade of a large number of growth factors and cytokines. The activity of GSK is regulated by phosphorylation (Akt: Akt-mediated phosphorylation at Ser21 of GSK-3a and Ser9 of GSK-3

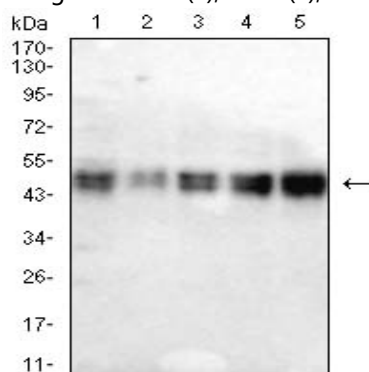
Research Area

Wnt signaling pathway, PI3K-Akt signaling pathway

Image Data

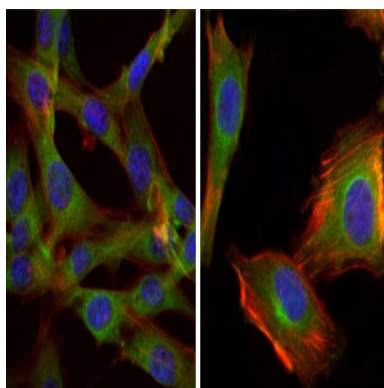


Western blot analysis using GSK3B mouse mAb against A549 (1), K562 (2), PC-12 (3), NIH/3T3 (4), and HEK293 (5) cell lysate.

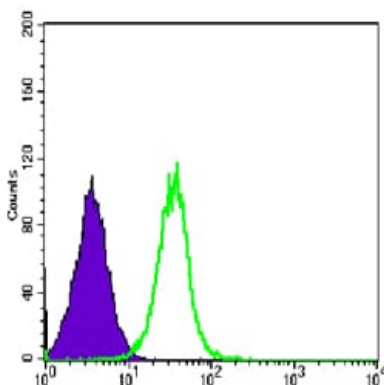


Western blot analysis using GSK3B mouse mAb against COS7(1),C2C12(2),NIH/3T3(3),C6(4),PC12(5) cell lysate.

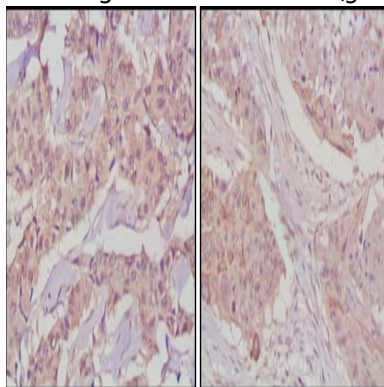
Product Name: GSK3B Mouse Monoclonal Antibody
Catalog #: AMM80814



Immunofluorescence analysis of NIH/3T3 (left) and U251 (right) cells using GSK3B mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.



Flow cytometric analysis of Hela cells using GSK3B mouse mAb (green) and negative control (purple).



Immunohistochemical analysis of paraffin-embedded human lung cancer (left) and breast cancer tissues (right) using GSK3B mouse mAb with DAB staining.

Note

For research use only.