BT LAB
Bioassay Technology Laboratory
Optimize Your Research

GSK3B Monoclonal Antibody

Description

Product type	Antibody
Code	BT-MCA3458
Host	Mouse
Isotype	Mouse IgG2a
Size	100μL, 50μL
Immunogen	Purified recombinant fragment of human GSK3B expressed in E. Coli.
Mol wt	46kDa
Species reactivity	Human,Mouse,Monkey,Rat
Clonality	Monoclonal
Recommended application	WB,IHC,ICC,FCM
Concentration	N/A
Full name	N/A
Synonyms	GSK-3β;GSK3-beta

This product is for research use only, not for use in human, therapeutic or diagnostic procedure.

Background

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

Recommended Dilution

WB: 1:500 - 1:2000

IHC-p: 1:200 - 1:1000

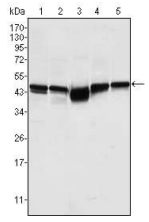
ICC: 1:200 - 1:1000

FCM: 1:200 - 1:400

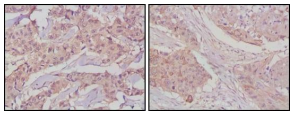
ELISA: 1:10000

Not yet tested in other applications.

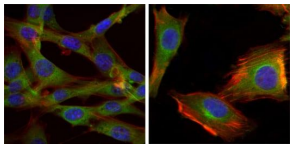
Images



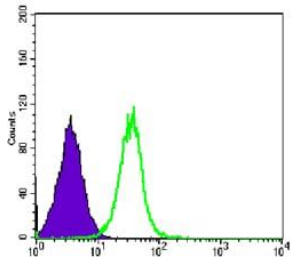
Western blot analysis using GSK3B mouse mAb against A549 (1), K562 (2), PC-12 (3), NIH/3T3 (4), and HEK293 (5) cell lysate.



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



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).

Storage

Store at 4°C short term. Aliquot and store at -20°C long term.

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