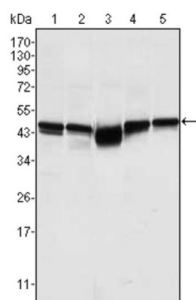
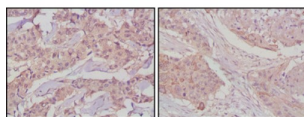


Glycogen Synthase Kinase 3 Beta (GSK3B) Antibody

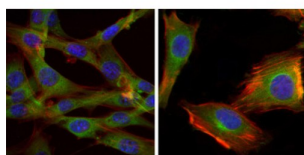
Catalogue No.: abx010856



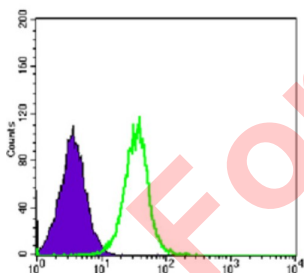
Western blot analysis using GSK3B antibody against A549 (1), K562 (2), PC-12 (3), NIH/3T3 (4), and HEK293 (5) cell lysate.



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



Immunofluorescence analysis of NIH/3T3 (left) and U251 (right) cells using GSK3B antibody (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with AF555 phalloidin.



Flow cytometric analysis of HeLa cells using GSK3B antibody (green) and negative control (purple).

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-3 beta 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-3 alpha and Ser9 of GSK-3 beta, S6K, RSK, PKA and PKC), dephosphorylation (PP1 and PP2A), and by binding to protein complexes (with beta catenin, axin, CK1 and the APC complex).

Datasheet

Version: 2.0.0
Revision date: 05 Jun 2025



Target:	Glycogen Synthase Kinase 3 Beta (GSK3B)
Clonality:	Monoclonal
Reactivity:	Human, Mouse, Monkey, Rat
Tested Applications:	ELISA, WB, IHC, IF/ICC, FCM
Host:	Mouse
Recommended dilutions:	ELISA: 1/10000, WB: 1/500 - 1/2000, IHC: 1/200 - 1/1000, IF/ICC: 1/200 - 1/1000, FCM: 1/200 - 1/400. Optimal dilutions/concentrations should be determined by the end user.
Conjugation:	Unconjugated
Immunogen:	Purified recombinant fragment of human GSK3B expressed in E. coli.;
Isotype:	IgG _{2a}
Form:	Liquid
Purification:	Unpurified ascites.
Storage:	Aliquot and store at -20°C. Avoid repeated freeze/thaw cycles.
UniProt Primary AC:	P49841 (UniProt , ExPASy)
GeneID:	2932
KEGG:	hsa:2932
String:	9606.ENSP00000324806
Molecular Weight:	46 kDa
Buffer:	Ascitic fluid containing 0.03% sodium azide.
Concentration:	Not determined.
Note:	THIS PRODUCT IS FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC, THERAPEUTIC OR COSMETIC PROCEDURES. NOT FOR HUMAN OR ANIMAL CONSUMPTION.