

Product datasheet for **AM06391SU-N**

GSTA6P Mouse Monoclonal Antibody [Clone ID: 3D10]

Product data:

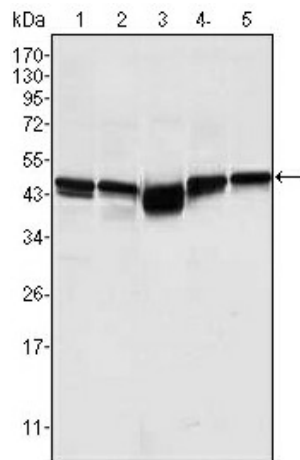
Product Type:	Primary Antibodies
Clone Name:	3D10
Applications:	ELISA, FC, IF, IHC, WB
Recommended Dilution:	Western Blot: 1/500 - 1/2000. Immunohistochemistry on paraffin sections: 1/200 - 1/1000. Immunofluorescence: 1/200 - 1/1000. Flow cytometry: 1/200 - 1/400. ELISA: 1/10000.
Reactivity:	Human, Monkey, Mouse, Rat
Host:	Mouse
Isotype:	IgG2a
Clonality:	Monoclonal
Immunogen:	Purified recombinant fragment of human GSK3B expressed in E. Coli.
Specificity:	This antibody reacts to GSK3B.
Formulation:	State: Ascites State: Ascitic fluid containing 0.03% sodium azide.
Conjugation:	Unconjugated
Storage:	Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	46 kDa
Gene Name:	glutathione S-transferase alpha 6, pseudogene



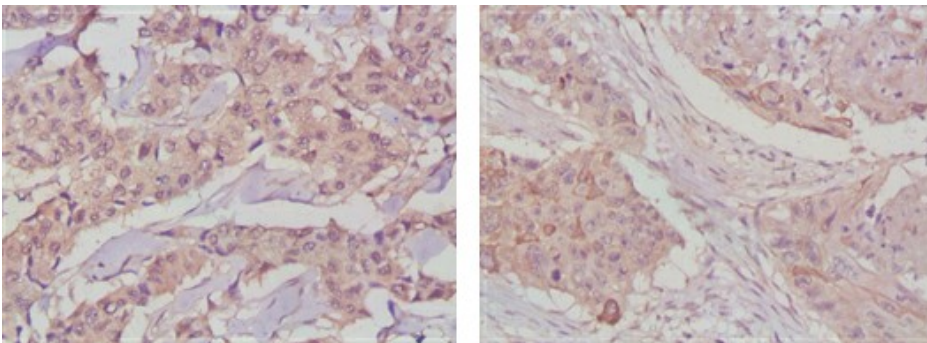
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Background:

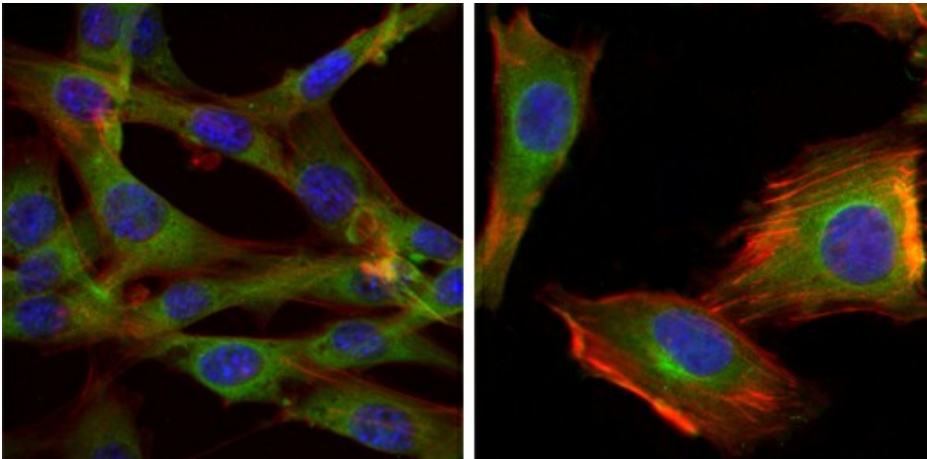
Glycogen synthase kinase 3 (GSK-3), a serine-threonine kinase with two isoforms (alpha and beta), was originally discovered as a key enzyme in glycogen metabolism. GSK-3 was subsequently shown to function in cell division, proliferation, motility and survival. GSK-3 plays a role in a number of pathological 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-3 α and Ser9 of GSK-3 β , S6K, RSK, PKA and PKC), dephosphorylation (PP1 and PP2A), and by binding to protein complexes (with beta-catenin, axin, CK1 and the APC complex).

Synonyms:GSK-3 β , GSK3-beta**Product images:**

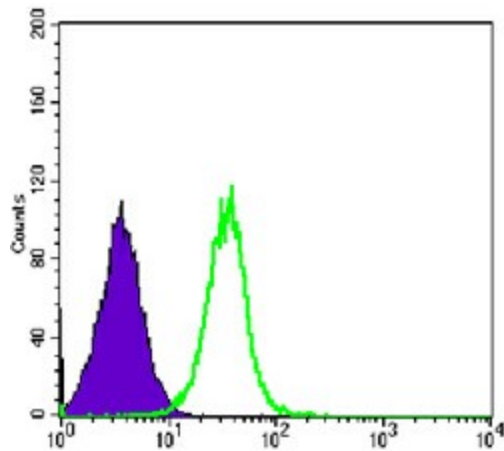
Western blot analysis using GSK3B mouse mAb against A549 (1), K562 (2), PC-12 (3), NIH/3T3 (4), and HEK293 (5) cell lysate.



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).