

GSK3 β (Phospho-Ser9) Antibody

Catalog No: #11002

Package Size: #11002-1 50ul #11002-2 100ul

Description

Product Name	GSK3 β (Phospho-Ser9) Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Antibodies were produced by immunizing rabbits with synthetic phosphopeptide and KLH conjugates. Antibodies were purified by affinity-chromatography using epitope-specific phosphopeptide. Non-phospho specific antibodies were removed by chromatography using non-phosphopeptide.
Applications	WB IHC IF
Species Reactivity	Hu Ms Rt
Specificity	The antibody detects endogenous level of GSK3 beta only when phosphorylated at serine 9.
Immunogen Type	Peptide-KLH
Immunogen Description	Synthesized phospho-peptide around the phosphorylation site of human GSK3 β (phospho Ser9)
Conjugates	Unconjugated
Target Name	GSK3 β
Modification	Phospho
Other Names	Factor A, GSK-3 beta, Protein kinase GSK-3-beta, kinase GSK-3 beta
Accession No.	Swiss-Prot: P49841NCBI Protein: NP_001139628.1
SDS-PAGE MW	46kd
Concentration	1.0mg/ml
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Storage	Store at -20°C for long term preservation (recommended). Avoid Store at 4°C for short term use.

Application Details

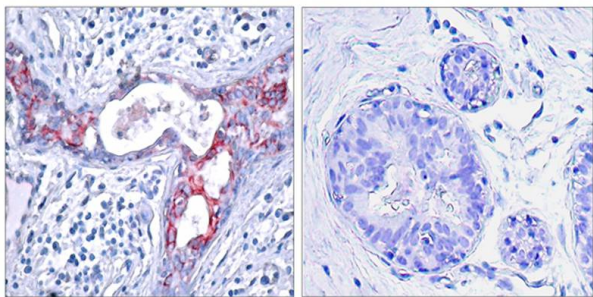
Predicted MW: 46kd

Western blotting: 1:500~1:1000

Immunohistochemistry: 1:50~1:100

Immunofluorescence: 1:100~1:200

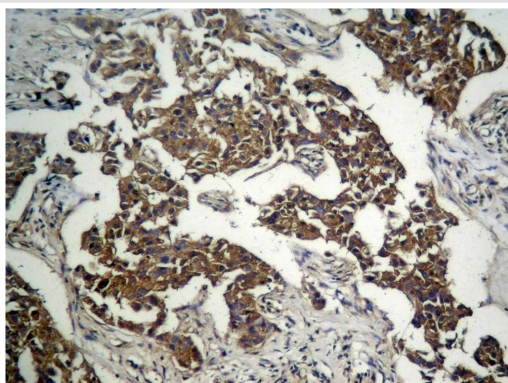
Images



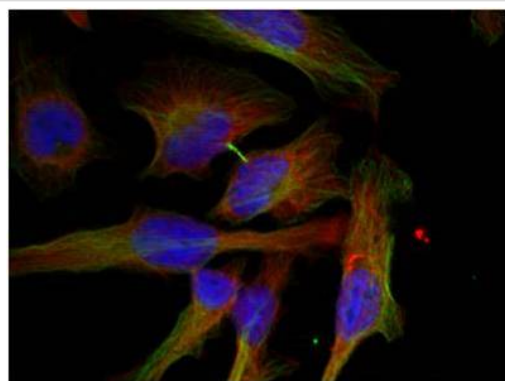
Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using GSK3 β (Phospho-Ser9) Antibody #11002 (left) or the same antibody preincubated with blocking peptide(right).



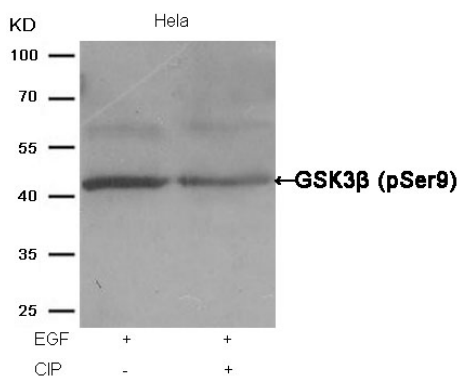
Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic staining using GSK3 β (Phospho-Ser9) Antibody #11002.



Immunohistochemical analysis of paraffin-embedded human Lung carcinoma tissue using GSK3 β (Phospho-Ser9) Antibody #11002.



Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic staining using GSK3 β (Phospho-Ser9) Antibody #11002.



Western blot analysis of extracts from HeLa cells, treated with EGF or calf intestinal phosphatase (CIP), using GSK3 β (Phospho-Ser9) Antibody #11002.

Background

Participates in the Wnt signaling pathway. Implicated in the hormonal control of several regulatory proteins including glycogen synthase, MYB and the transcription factor JUN. Phosphorylates JUN at sites proximal to its DNA-binding domain, thereby reducing its affinity for DNA. Phosphorylates MUC1 in breast cancer cells, and decreases the interaction of MUC1 with CTNNB1/beta-catenin. Phosphorylates CTNNB1/beta-catenin.

Fan G, et al. (2003) J Biol Chem. 278(52): 52432-52436.

Barry FA, et al. (2003) FEBS Lett. 553(1-2): 173-178.

Welsh, et al. (1996) Trends Cell Biol. 6: 274-279.

Srivastava A K, et al. (1998) Mol Cell Biochem. 182: 135-141.

Published Papers

Cong REN, Jia-Mou LI, Xin LIN et al., LIPUS Enhance Elongation of Neurites in Rat Cortical Neurons through Inhibition of GSK-3 ϵ θ , Biomedical and Environmental Sciences, 23(3):244-249(2010)

[PMID:20708505](#)

Estefanq— i a de Munck, Emma Mu?noz-Sq— ε ez, Bego?na G. Miguel el at., B-N-methylamino-l-alanine causes neurological andpathological phenotypes mimicking Amyotrophic LateralSclerosis (ALS): The first step towards an experimentalmodel for sporadic ALS. , environmental toxicology and pharmacology, 36:243q— C255(2013)

[PMID:23688553](#)

Wen-Fei Tan, Xue-Zhao Cao, Jun-KeWang el at., Protective effects of lithium treatment for spatial memory deficits induced by tau hyperphosphorylation in splenectomized rats., Clinical and Experimental Pharmacology and Physiology., 37(10):1010q— C1015(2010)

[PMID:20659131](#)

Yingjuan Yang, Jinzeng Yang, Rongxin Liu el at., Accumulation of ϵ θ -catenin by lithium chloride in porcine myoblast cultures accelerates cell differentiation., Molecular Biology Reports, Volume 38, Number 3, Pages 2043-2049(2011)

[PMID:20857211](#)

Yu-fei Pan, Li-wei Dong, Min Wang el at., Signal regulatory protein ϵ θ negatively regulates mast-cell activation following Fc ϵ θ RI aggregation., Eur. J. Immunol., 43(6):1598q— C1607(2013)

[PMID:23504624](#)

el at., Periostin secreted by cancer-associated fibroblasts promotes cancer stemness in head and neck cancer by activating protein tyrosine kinase 7.In Cell Death Dis.On 2018 Oct 22 by Yu B, Wu K et al..PMID: 30348980, , (2018)

[PMID:30348980](#)

el at., Epithelial Cells Attenuate Toll-Like Receptor-Mediated Inflammatory Responses in Monocyte-Derived Macrophage-Like Cells to Mycobacterium tuberculosis by Modulating the PI3K/Akt/mTOR Signaling Pathway.In Mediators Inflamm.On 2018 Sep by Yang Y, Sun Y et al..PMID:30356420, , (2018)

[PMID:30356420](#)

el at., Protective effects of lithium treatment for spatial memory deficits induced by tau hyperphosphorylation in splenectomized rats.In Clin Exp Pharmacol Physiol on 2010 Oct by Tan WF, Cao XZ,et al..PMID:20659131, , (2010)

[PMID:20659131](#)

el at., LIPUS Enhance Elongation of Neurites in Rat Cortical Neurons Through Inhibition of GSK-3beta.In Biomed Environ Sci on 2010 Jun by Cong Ren, Jia-Mou Li, et al..PMID:20708505, , (2010)

[PMID:20708505](#)

el at., Quantitative proteomics reveals that miR-155 regulates the PI3K-AKT pathway in diffuse large B-cell lymphoma. In Am J Pathol on 2012 Jul by Huang X, Shen Y,et al..PMID:22609116, , (2012)

[PMID:22609116](#)

el at., Accumulation of ϵ° Y-Catenin by Lithium Chloride in Porcine Myoblast Cultures Accelerates Cell Differentiation. In Mol Biol Rep on 2011 Mar by Yingjuan Yang, Jinzeng Yang, et al.. PMID:20857211, , (2011)

[PMID:20857211](#)

el at., Phosphoproteome analysis reveals an important role for glycogen synthase kinase-3 in perfluorododecanoic acid-induced rat liver toxicity. In Toxicol Lett on 2013 Mar 27 by Hongxia Zhang, Junjie Hou, et al.. PMID: 23353032, , (2013)

[PMID:23353032](#)

el at., ϵ° Y-N-methylamino-L-alanine causes neurological and pathological phenotypes mimicking Amyotrophic Lateral Sclerosis (ALS): The first step towards an experimental model for sporadic ALS. In Environ Toxicol Pharmacol on 2013 Sep by Estefani a de Munck, Emma Muc'E½oz-Sθ°ez, et al.. PMID: 23688553, , (2013)

[PMID:23688553](#)

el at., Signal regulatory protein δ° negatively regulates masti ζ• ell activation following Fcθ RI aggregation. In Eur J Immunol on 2013 Jun by Yu-fei Pan, Li-wei Dong, et al.. PMID: 23504624, , (2013)

[PMID:23504624](#)

el at., Gastroke-2 suppresses epithelial mesenchymal transition through PI3K/AKT/GSK3 ϵ° Y signaling in gastric cancer. In Tumour Biol. On 2016 Sep by Dai J, Qian C et al.. PMID:27323966, , (2016)

[PMID:27323966](#)

el at., Overexpression of astrocyte-elevated gene-1 is associated with ovarian cancer development and progression. In Mol Med Rep on 2015 Apr by Bo Zhou, Jue Yang et al.. PMID:25483832, , (2015)

[PMID:25483832](#)

el at., Fumosorinone, a Novel PTP1B Inhibitor, Activates Insulin Signaling in Insulin-Resistance HepG2 Cells and Shows Anti-Diabetic Effect in Diabetic KKAy Mice. In Toxicol Appl Pharmacol On 2015 May 15 by Zhi-Qin Liu, Ting Liu et al.. PMID: 25796170

, , (2015)

[PMID:25796170](#)

el at., A ϵ° Y1/2 Adrenergic Receptor ζ ±ensitive Intracellular Signaling Pathway Modulates CCL2 Production in Cultured Spinal Astrocytes. In J Cell Physiol on 2014 Mar by Norimitsu Morioka, Hiromi Abe et al.. PMID:24037783, , (2014)

[PMID:24037783](#)

el at., SNAILs promote G1 phase in selected cancer cells. In Int J Oncol on 2015 Nov by Ya-Lan Wu, Jian-Xin Xue et al.. PMID:26352801, , (2015)

[PMID:26352801](#)

Xiaoyang Yuan;Huijing Huang;Yi Huang;Jinli Wang;Jinhua Yan;Ling Ding;Cuntai Zhang;Le Zhang el at., Nuclear factor E2-related factor 2 knockdown enhances glucose uptake and alters glucose metabolism in AML12 hepatocytes, , (2017)

[PMID:28440735](#)

Yan Yu;Chengchun Zhu;Xiao Wang;Ying Shi;Yiping Gao;Zhiyi Yu el at., hERG activators exhibit antitumor effects in breast cancer through calcineurin and β-catenin-mediated signaling pathways., , (2025)

[PMID:39917621](#)

Note: This product is for in vitro research use only and is not intended for use in humans or animals.