

GSK3 $\alpha/\beta$ (Phospho-Tyr279/216) Antibody

Catalog No: #11301



Package Size: #11301-1 50ul #11301-2 100ul

Orders: [order@signalwayantibody.com](mailto:order@signalwayantibody.com)Support: [tech@signalwayantibody.com](mailto:tech@signalwayantibody.com)

## Description

Product Name	GSK3 $\alpha/\beta$ (Phospho-Tyr279/216) 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	IF, WB, IHC, ELISA
Species Reactivity	Hu Ms Rt
Specificity	The antibody detects endogenous level of GSK3 $\alpha/\beta$ only when phosphorylated at tyrosine 279/216.
Immunogen Type	Peptide-KLH
Immunogen Description	Peptide sequence around phosphorylation site of tyrosine 279/216 (V-S-Y(p)-I-C) derived from Human GSK3 $\alpha/\beta$ .
Target Name	GSK3 $\alpha/\beta$
Modification	Phospho
Other Names	Factor A; GSK-3 alpha/beta; kinase GSK3-alpha/beta
Accession No.	Swiss-Prot: P49840/P49841NCBI Protein: NP_063937.2/NP_001139628.1
Concentration	1.0mg/ml
Formulation	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg <sup>2+</sup> and Ca <sup>2+</sup> ), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C for long term preservation (recommended). Store at 4°C for short term use.

## Application Details

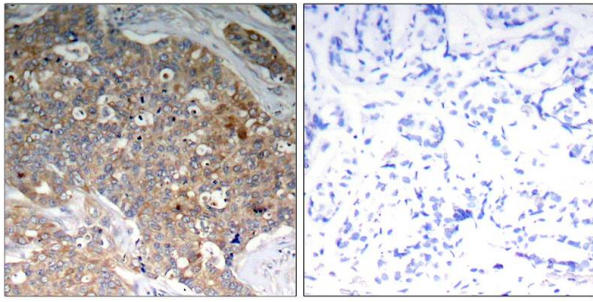
Predicted MW: 46, 51kd

Western blotting: 1:500~1:1000

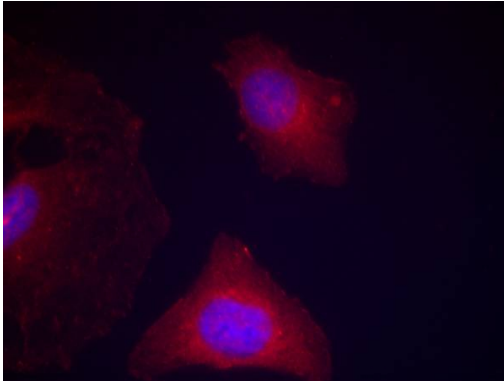
Immunohistochemistry: 1:50~1:100

Immunofluorescence: 1:100~1:200

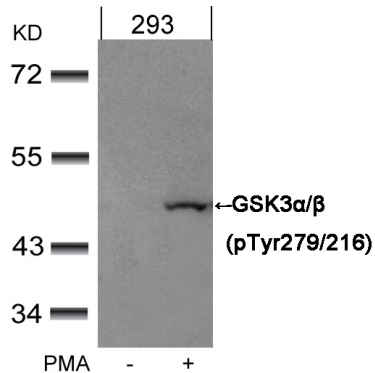
## Images



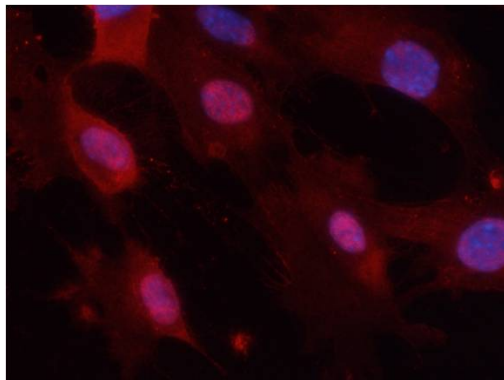
Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using GSK3α/β(Phospho-Tyr279/216) Antibody #11301 (left) or the same antibody preincubated with blocking peptide #51301 (right).



Immunofluorescence staining of methanol-fixed HeLa cells using GSK3α/β(Phospho-Tyr279/216) Antibody #11301.



Western blot analysis of extracts from 293 cells untreated or treated with PMA using GSK3α/β(Phospho-Tyr279/216) Antibody #11301.



Immunofluorescence staining of methanol-fixed MEF cells using GSK3α/β(Phospho-Tyr279/216) Antibody #11301.

## 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.

Chin PC, et al. *Brain Res Mol Brain Res* 2005 Jun 13; 137(1-2): 193-201

Takahashi-Yanaga F, et al. *Biochem Biophys Res Commun* 2004 Apr 02; 316(2): 411-415

Fan G, et al. *J Biol Chem* 2003 Dec 26; 278(52): 52432-52436

Liao X, et al. *Mol Cancer Ther* 2003 Nov; 2(11): 1215-1222

## Published Papers

et al., Ca<sup>2+</sup>-dependent release of ATP from astrocytes affects herpes simplex virus type 1 infection of neurons. In *Glia* on 2021 Jan by Domenica Donatella Li Puma, Maria Elena

Marcocci, et al..PMID:32818313, , (2021)

[PMID:32818313](#)

et al., Herpes Simplex Virus type-1 infection induces synaptic dysfunction in cultured cortical neurons via GSK-3 activation and intraneuronal amyloid- $\epsilon$  protein accumulation. In *Sci Rep*

on 2015 Oct 21 by Roberto Piacentini, Domenica Donatella Li Puma et al ..PMID:26487282, , (2015)

[PMID:26487282](#)

et al., 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](#)

et al., Activation of GSK3 $\epsilon$  by Sirt2 is required for early lineage commitment of mouse embryonic stem cell. In *PLoS One* on 2013 Oct 18 by Xiaoxing Si, Wen Chen, et al..PMID: 24204656, , (2013)

[PMID:24204656](#)

Song Chen, Ai-ran Liu, Feng-mao An et al., Amelioration of neurodegenerative changes in cellular and rat models of diabetes-related Alzheimer's disease by exendin-4, *AGE*, 34(5):1211–1224(2012)

[PMID:21901364](#)

et al., Amelioration of neurodegenerative changes in cellular and rat models of diabetes-related Alzheimer's disease by exendin-4. In *Age (Dordr)* on 2012 Oct by Song Chen,

Ai-ran Liu, et al..PMID:21901364, , (2012)

[PMID:21901364](#)

Hirakawa Hiroshi, Nakayama Toshiyuki, Shibata Kenichiro et al., Association of cellular localization of glycogen synthase kinase 3beta in the digestive tract with cancer development., *Oncology Reports*, 22(3), 481-485(2009)

[PMID:19639192](#)

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