

Resource Summary Report

Generated by [RRID](#) on Aug 24, 2026

HA GSK3 beta K85A pcDNA3

RRID:Addgene_14755

Type: Plasmid

Proper Citation

RRID:Addgene_14755

Plasmid Information

URL: <http://www.addgene.org/14755>

Proper Citation: RRID:Addgene_14755

Insert Name: GSK3 beta K85A

Organism: Homo sapiens

Bacterial Resistance: Ampicillin

Defining Citation: [PMID:8382613](#)

Vector Backbone Description: Backbone Marker:Invitrogen; Backbone Size:5500; Vector Backbone:pcDNA3; Vector Types:Mammalian Expression; Bacterial Resistance:Ampicillin

Comments: Nru I site is added to the K->A mutation

Plasmid Name: HA GSK3 beta K85A pcDNA3

Relevant Mutation: K85A. Kinase dead mutant.

Record Creation Time: 20220422T221825+0000

Record Last Update: 20260815T080707+0000

Ratings and Alerts

No rating or validation information has been found for HA GSK3 beta K85A pcDNA3.

No alerts have been found for HA GSK3 beta K85A pcDNA3.

Data and Source Information

Usage and Citation Metrics

We found 34 mentions in open access literature.

Listed below are recent publications. The full list is available at [RRID](#) .

Alex L, et al. (2026) Phosphorylation of Cyclophilin-D is Not Required for Regulation of The Mitochondrial Permeability Transition Pore by GSK3?. bioRxiv : the preprint server for biology.

Park J, et al. (2025) CO confers neuroprotection via activating the PERK-calcineurin pathway and inhibiting necroptosis. Cell death discovery, 11(1), 254.

Ragu Varman D, et al. (2021) Glycogen synthase kinase-3 β supports serotonin transporter function and trafficking in a phosphorylation-dependent manner. Journal of neurochemistry, 156(4), 445.

Wang W, et al. (2021) Endonuclease G promotes autophagy by suppressing mTOR signaling and activating the DNA damage response. Nature communications, 12(1), 476.

Cortés-Gómez MÁ, et al. (2021) Tau phosphorylation by glycogen synthase kinase 3 γ modulates enzyme acetylcholinesterase expression. Journal of neurochemistry, 157(6), 2091.

Hou B, et al. (2020) HGF protected against diabetic nephropathy via autophagy-lysosome pathway in podocyte by modulating PI3K/Akt-GSK3 γ -TFEB axis. Cellular signalling, 75, 109744.

Markussen LK, et al. (2018) GSK3 is a negative regulator of the thermogenic program in brown adipocytes. Scientific reports, 8(1), 3469.

Abd-Ellah A, et al. (2018) GSK3 γ modulates NF- κ B activation and RelB degradation through site-specific phosphorylation of BCL10. Scientific reports, 8(1), 1352.

Tong Y, et al. (2018) Modulation of GSK3 γ autoinhibition by Thr-7 and Thr-8. FEBS letters, 592(4), 537.

Sarikhani M, et al. (2018) SIRT2 deacetylase regulates the activity of GSK3 isoforms independent of inhibitory phosphorylation. eLife, 7.

Gozdz A, et al. (2017) GSK3 γ and GSK3 β Phosphorylate Arc and Regulate its Degradation. Frontiers in molecular neuroscience, 10, 192.

Hinds TD, et al. (2016) Biliverdin Reductase A Attenuates Hepatic Steatosis by Inhibition of Glycogen Synthase Kinase (GSK) 3 γ Phosphorylation of Serine 73 of Peroxisome Proliferator-activated Receptor (PPAR) γ . The Journal of biological chemistry, 291(48), 25179.

Guo X, et al. (2016) GSK3 β regulates AKT-induced central nervous system axon regeneration via an eIF2B β -dependent, mTORC1-independent pathway. *eLife*, 5, e11903.

Zhang C, et al. (2016) HGF alleviates high glucose-induced injury in podocytes by GSK3 β inhibition and autophagy restoration. *Biochimica et biophysica acta*, 1863(11), 2690.

Metge BJ, et al. (2015) N-Myc and STAT Interactor regulates autophagy and chemosensitivity in breast cancer cells. *Scientific reports*, 5, 11995.

Gao FJ, et al. (2015) GSK-3 β Phosphorylation of Cytoplasmic Dynein Reduces Ndel1 Binding to Intermediate Chains and Alters Dynein Motility. *Traffic (Copenhagen, Denmark)*, 16(9), 941.

Ngkelo A, et al. (2015) Glycogen synthase kinase-3 β modulation of glucocorticoid responsiveness in COPD. *American journal of physiology. Lung cellular and molecular physiology*, 309(10), L1112.

Kannan MB, et al. (2015) Stringent Control of NFE2L3 (Nuclear Factor, Erythroid 2-Like 3; NRF3) Protein Degradation by FBW7 (F-box/WD Repeat-containing Protein 7) and Glycogen Synthase Kinase 3 (GSK3). *The Journal of biological chemistry*, 290(43), 26292.

Levin-Gromiko U, et al. (2014) Amplified lipid rafts of malignant cells constitute a target for inhibition of aberrantly active NFAT and melanoma tumor growth by the aminobisphosphonate zoledronic acid. *Carcinogenesis*, 35(11), 2555.

Gonzalez OG, et al. (2014) Telomerase stimulates ribosomal DNA transcription under hyperproliferative conditions. *Nature communications*, 5, 4599.