Active Recombinant Full Length Human GSK3A Protein, C-Flag-tagged

Cat. No. GSK3A-156HFL **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Full Length Human GSK3A Protein, fused to Flag-tag at C-terminus, was expressed in Mammalian cells.
Species	Human
Source	Mammalian Cells
Description	This gene encodes a multifunctional Ser/Thr protein kinase that is implicated in the control of several regulatory proteins including glycogen synthase, and transcription factors, such as JUN. It also plays a role in the WNT and PI3K signaling pathways, as well as regulates the production of beta-amyloid peptides associated with Alzheimer's disease.
Form	25 mM Tris HCl, pH 7.3, 100 mM glycine, 10% glycerol.
Bio-activity	In vitro kinase assay (enzyme) Thermophoresis assay
Molecular Mass	50.8 kDa
AA Sequence	MSGGGPSGGGPGGSGRARTSSFAEPGGGGGGGGGGPGGSASGPGGTGGGKAS VGAMGGGVGASSSGGGPG GSGGGGSGGPGAGTSFPPPGVKLGRDSGKVTTVVA TLGQGPERSQEVAYTDIKVIGNGSFGVVYQARLAE TRELVAIKKVLQDKRFKNRELQ IMRKLDHCNIVRLRYFFYSSGEKKDELYLNLVLEYVPETVYRVARHFT KAKLTIPILYV

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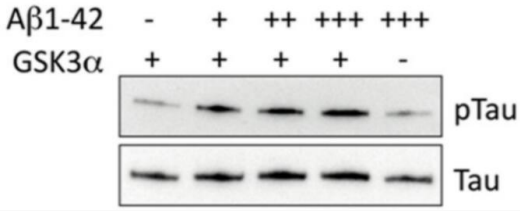
	KVYMYQLFRSLAYIHSQGVCHRDIKPQNLLVDPDTAVLKLCDFGSAKQLVRGEPNVS YI CSRYYRAPELIFGATDYTSSIDVWSAGCVLAELLLGQPIFPGDSGVDQLVEIIKVLG TPTREQIREMNPN YTEFKFPQIKAHPWTKVFKSRTPPEAIALCSSLLEYTPSSRLSPL EACAHSFFDELRCLGTQLPNNRPLP PLFNFSAGELSIQPSLNAILIPPHLRSPAGTTTLTPSSQALTETPTSSDWQSTDATPTL TNSSTRTRPLEQKLISEEDLAANDILDYKDDDDKV
Purity	> 80% as determined by SDS-PAGE and Coomassie blue staining.
Stability	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
Storage	Store at -80 centigrade.
Concentration	>50 ug/mL as determined by microplate BCA method.
Preparation	Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.
Protein Families	Druggable Genome, Protein Kinase
Protein Pathways	Chemokine signaling pathway
Full Length	Full L.

GENE INFORMATION

Gene Name	GSK3A glycogen synthase kinase 3 alpha [Homo sapiens (human)]
Official Symbol	GSK3A

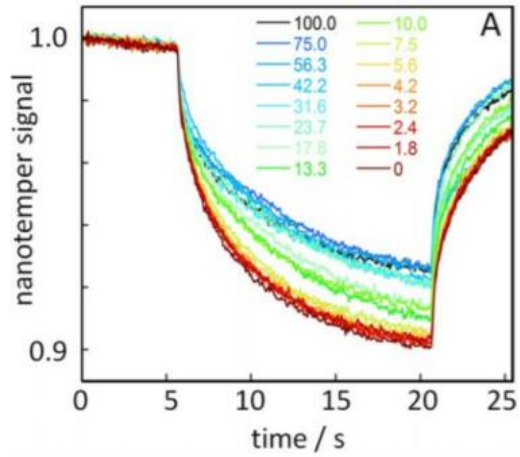
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Synonyms	DKFZp686D0638
Gene ID	2931
mRNA Refseq	NM_019884.3
Protein Refseq	NP_063937.2
MIM	606784
UniProt ID	P49840

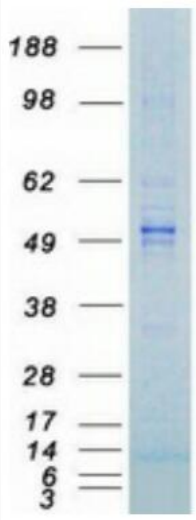


Tau phosphorylation assay. Tau and pTau were detected in Western blot after a kinase assay reaction in the absence (-) or the presence of Abeta1-40 at 5 (+), 50 (++), or 500 nM (+++), and the absence (-) or the presence (+) of GSK3alpha.

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Thermophoresis analysis of the interaction between Abeta42 and GSK3alpha. Thermophoresis time traces at 37 centigrade for the 16 capillaries containing solutions with 60 nM Abeta42 alone and varying concentrations of GSK3alpha from 0 to 188 nM. The example shown is recorded after 635 min, and the GSK3alpha concentrations are listed as the percentage of the highest (188 nM).



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Coomassie blue staining of purified GSK3A.

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