

**Product:** GSK3b, active  
**Catalog #:** 02-2012  
**Amount:** 5 µg

**DESCRIPTION:**

GSK3b is a serine threonine protein kinase that was originally identified as the kinase that phosphorylate and inhibits glycogen synthase (1). GSK3b is ubiquitously present in human tissues and implicated in the regulation of several physiological processes, including the control of glycogen and protein synthesis by insulin, modulation of the transcription factors AP-1 and CREB. Transient transfection of human GSK3 beta into Chinese hamster ovary cells stably transfected with individual human tau isoforms leads to hyperphosphorylation of tau at all the sites investigated with phosphorylation-dependent anti-tau antibodies (2)

The gene accession number is [NM 002093](#)

Gene Aliases: GPRK5

**SOURCE:**

Recombinant full-length human GSK3b was expressed by baculovirus in Sf9 insect cells using a N-terminal GST tag

**MOLECULAR WEIGHT:**

73 kDa

**PURITY:**

> 90% (by densitometry)

**FORM:**

Purified, in 50mM Tris-HCl, pH 7.5, 150mM NaCl, 0.25mM DTT, 0.1mM EGTA, 0.1mM EDTA, 0.1mM PMSF, 25% glycerol

**CONCENTRATION:**

0.1 mg/ml

**SPECIFIC ACTIVITY:**

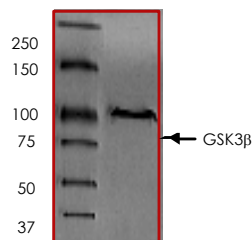
101 nmol/mim/mg

**STORAGE:**

-70°C (aliquot). AVOID repeated Freeze/thaw cycles

**REFERENCE:**

1. Sutherland C. et al: Inactivation of glycogen synthase kinase-3 beta by phosphorylation: new kinase connections in insulin and growth-factor signalling. *Biochem J.* 1993 Nov 15;296 ( Pt 1):15-9
2. Sperber BR, Leight S, Goedert M, Lee VM. Glycogen synthase kinase-3 beta phosphorylates tau protein at multiple sites in intact cells. *Neurosci Lett.* 1995 Sep 8;197(2):149-53



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