## **PRODUCT INFORMATION**

**Expression system** E.coli

**Domain** 1-420aa

**UniProt No.** P49841

NCBI Accession No. NP\_001139628

**Alternative Names** 

Glycogen synthase kinase 3 beta isoform 2, GSK-3 beta, Glycogen synthase kinase-3 beta

# **PRODUCT SPECIFICATION**

Molecular Weight 46 kDa (420aa)

**Concentration** 0.5mg/ml (determined by Bradford assay)

### Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 0.4M urea, 10% glycerol

Purity

> 85% by SDS-PAGE

Tag Non-Tagged

Application SDS-PAGE, Denatured

### **Storage Condition**

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

### BACKGROUND

### Description

GSK3B is a serine-threonine kinase, belonging to the glycogen synthase kinase subfamily. It is involved in energy metabolism, neuronal cell development, and body pattern formation. Polymorphisms in this gene have been implicated in modifying risk of Parkinson disease, and studies in mice show that overexpression of this gene may be relevant to the pathogenesis of Alzheimer disease. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. Recombinant human GSK3B protein, was expressed in E. coli.



### **Amino acid Sequence**

MSGRPRTTSF AESCKPVQQP SAFGSMKVSR DKDGSKVTTV VATPGQGPDR PQEVSYTDTK VIGNGSFGVV YQAKLCDSGE LVAIKKVLQD KRFKNRELQI MRKLDHCNIV RLRYFFYSSG EKKDEVYLNL VLDYVPETVY RVARHYSRAK QTLPVIYVKL YMYQLFRSLA YIHSFGICHR DIKPQNLLLD PDTAVLKLCD FGSAKQLVRG EPNVSYICSR YYRAPELIFG ATDYTSSIDV WSAGCVLAEL LLGQPIFPGD SGVDQLVEII KVLGTPTREQ IREMNPNYTE FKFPQIKAHP WTKVFRPRTP PEAIALCSRL LEYTPTARLT PLEACAHSFF DELRDPNVKL PNGRDTPALF NFTTQELSSN PPLATILIPP HARIQAAAST PTNATAASDA NTGDRGQTNN AASASASNST

### **General References**

Guo X, Ramirez A, et al. (2008). Genes Dev. 22(1):106-20. Espinosa L, Ingles-Esteve J, et al. (2003). J Biol Chem. 278(34):32227-35.

## DATA



15% SDS-PAGE (3ug)

3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.