

# Recombinant human GSK-3 beta protein

Catalog Number: ATGP3221

## PRODUCT INFORMATION

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### Expression system

Baculovirus

### Domain

1-420aa

### UniProt No.

P49841

### NCBI Accession No.

NP\_001139628.1

### Alternative Names

GSK-3 beta, Serine/threonine-protein kinase GSK3B

## PRODUCT SPECIFICATION

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### Molecular Weight

47.5 kDa (426aa)

### Concentration

0.25mg/ml (determined by absorbance at 280nm)

### Formulation

Liquid in. Phosphate-Buffered Saline (pH 7.4) containing 0.5mM PMSF and 30% glycerol

### Purity

> 90% by SDS-PAGE

### Endotoxin level

< 1 EU per 1ug of protein (determined by LAL method)

### Tag

His-Tag

### Application

SDS-PAGE

### 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

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### Description

GSK3B, also known as glycogen synthase kinase-3 beta, acts as a negative regulator in the hormonal control of glucose homeostasis. Also, this protein has diverse functions as Wnt signaling and regulation of transcription factors and microtubules, by phosphorylating and inactivating glycogen synthase (GYS1 or GYS2), EIF2B, CTNNB1/beta-catenin, APC, AXIN1, DPYSL2/CRMP2, JUN, NFATC1/NFATC, MAPT/TAU and MACF1. Recombinant

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human GSK3B, fused to His-tag at C-terminus, was expressed in insect cell and purified by using conventional chromatography techniques.

## Amino acid Sequence

MSGRPRRTTSF AESCKPVQQP SAFGSMKVS R DKDGSKVTTV VATPGQGPDR PQEVSYTDTK VIGNGSFGVW YQAKLCDSGE  
LVAIKKVLQD KRFKNRELQI MRKLDHCNIV RLRYFFYSSG EKKDEVYLN L VLDYVPETVY RVARHYSRAK QTLPIYVVKL  
YMYQLFRSLA YIHSFGICHR DIKPQNLLLD PDTAVLKLCD FGS AKQLVRG EPNVSYICSR YYRAPELIFG ATDYTSSIDV  
WSAGCVLAEL LLGQPIFPGD SGVDQLVEII KVLGTP TREQ IREMNP NYTE FKFPQIKAHP WTKVFRP RTP PEAIALCSRL  
LEYTP TARLT PLEACAHSFF DELRDP NVKL PNGRDT PALF NFFTQELSSN PPLATILIPP HARIQAAAST PTNATAASDA  
NTGDRGQTNN AASASASNST <HHHHHH>

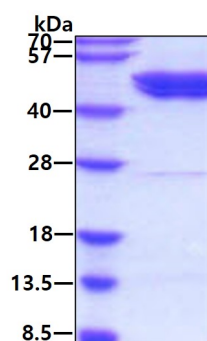
## General References

Desai SS., et al. (2014) J. Biol. Chem. 289(9):5386-5398.

Cheng DD., et al. (2014) Biochem. Biophys. Res. Commun. 443(2):598-603.

## DATA

### SDS-PAGE



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