

# Recombinant Human GSK-3 beta/GSK3B Kinase

Catalog No.: RP03407LQ Recombinant

### **Sequence Information**

Species Gene ID Swiss Prot Human 2932 P49841

Tags N-GST

**Synonyms** 

GSK3B; GSK-3 beta; GSK3 beta; GSK3β; Glycogen synthase kinase-3 beta

### **Product Information**

Source Purification

Baculovirus-Insect ≥ 90 % as

Cells determined by SDSPAGE;≥ 90 % as
determined by
HPLC.

### Calculated MW Observed MW

73.3 kDa 60-70 kDa

#### **Endotoxin**

< 1 EU/µg of the protein by LAL method.

### **Formulation**

Supplied as a 0.22 µm filtered solution in 50 mM Tris-HCl, 150 mM NaCl, 5% glycerol, 5 mM DTT, 0.1 M Trehalose. (pH 7.5). Contact us for customized product form or formulation.

### Reconstitution

Please use running water to thaw it quickly.

### **Contact**

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### **Background**

Glycogen synthase kinase-3 beta, (GSK-3 beta), is an enzyme that in humans is encoded by the GSK3B gene. Glycogen synthase kinase 3 (GSK-3) is a serine/threonine protein kinase that mediates the addition of phosphate molecules onto serine and threonine amino acid residues. In mammals, GSK-3 exists in two isozymes encoded by two homologous genes GSK-3 $\alpha$  (GSK3A) and GSK-3 $\beta$  (GSK3B). GSK-3 has been the subject of much research since it has been implicated in a number of diseases, including type 2 diabetes, Alzheimer's disease, inflammation, cancer, addiction and bipolar disorder. GSK3B is involved in energy metabolism, neuronal cell development, and body pattern formation. It might be a new therapeutic target for ischemic stroke.

### **Basic Information**

#### **Description**

Recombinant Human GSK-3 beta/GSK3B Kinase is produced by Baculovirus-Insect Cells expression system. The target protein is expressed with sequence (Ser2-Thr420) of Human GSK3B (Accession #P49841) fused with a N-GST tag.

#### **Bio-Activity**

The activity of GSK3B is based on the MSA technology, and the content and ratio of the substrate and the product are directly separated and detected in real time and dynamically by the different migration rates of the substrate and the product after the enzymatic reaction.

#### Shipping

The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

### **Storage**

Store at  $-70^{\circ}$ C. This product is stable at  $\leq -70^{\circ}$ C for up to 1 year from the date of receipt. For optimal storage, aliquot into smaller quantities after centrifugation and store at recommended temperature.

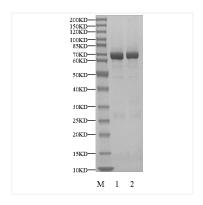
Aliquots below 10  $\mu\text{L}$  are not advisable. Product must not be stored in diluted solutions. Avoid repeated freeze-thaw cycles.

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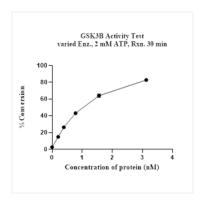
#### **Operational Notes**

For your safety and health, please wear a lab coat and disposable gloves for handling.

## **Validation Data**



Recombinant Human GSK-3 beta/GSK3B Kinase was resolved with SDS-PAGE under reducing (Lane 1) and non-reducing (Lane 2) conditions.



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