

## Anti-GSK3 $\alpha$

Rabbit Polyclonal Antibody

**Catalog # G08-63R**

Lot # D351-3

### Cited Applications

- Western blot (1:1000)

*Ideal working dilutions for each application should be empirically determined by the investigator.*

### Specificity

Recognizes the GSK3 $\alpha$  protein

### Cross Reactivity

- Western blot of human GSK3 $\alpha$

*GSK3 $\alpha$  from other species may also be detectable*

### Host

Rabbit

### Immunogen

Protein Code P49840

### Formulation

TBS, 50% glycerol

### Stability

Store at 4°C (add 0.1% NaN<sub>3</sub>) for several months, and at -20°C for longer periods. For optimal storage, aliquot target into smaller quantities after centrifugation and store at recommended temperature. For optimal performance, avoid repeated handling and multiple freeze/thaw cycles.

### Scientific Background

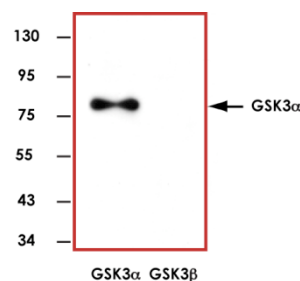
GSK3 $\alpha$  is a multifunctional protein serine kinase, homologous to *Drosophila* 'shaggy' (zeste-white3) and implicated in the control of several regulatory proteins including glycogen synthase and transcription factors (e.g., JUN) (1). GSK3 $\alpha$  also plays a role in the WNT and PI3K signaling pathways. Alzheimer disease is associated with increased production and aggregation of amyloid-beta-40 and -42 peptides into plaques. GSK3 $\alpha$  is required for maximal production of the beta-amyloid-40 and -42 peptides generated from the amyloid precursor protein by presenilin-dependent gamma-secretase cleavage. In vitro, lithium, a GSK3 $\alpha$  inhibitor, blocks the production of

the beta-amyloid peptides by interfering with the gamma-secretase step (2).

### References

1. Ali, A. et al: Glycogen synthase kinase-3 : properties, functions, and regulation. *Chem. Rev.* 101: 2527-2540, 2001.
2. Phiel, C J. et al: GSK-3-alpha regulates production of Alzheimer's disease amyloid-beta peptides. *Nature* 423: 435-439, 2003.

### Sample Data



Representative western blot with Anti-GSK3 $\alpha$  (1:1000) using 20 ng of GST-tagged recombinant human GSK3 $\alpha$  and GSK3 $\beta$ .

## Anti-GSK3 $\alpha$

Rabbit Polyclonal Antibody

Catalog Number

G08-63R

Specific Lot Number

D351-3

Purification

Affinity Chromatography

Concentration

1.0  $\mu$ g/ $\mu$ L

Stability

1yr At -20°C from date of shipment

Storage & Shipping

Store product at -20°C. For optimal storage, aliquot antibody into smaller quantities after centrifugation and store at recommended temperature. For optimal performance, avoid repeated handling and multiple freeze/thaw cycles. Product shipped on ice packs.

To place your order, please contact us by phone 1-(604)-232-4600, fax 1-604-232-4601 or by email: [orders@signalchem.com](mailto:orders@signalchem.com)  
[www.signalchem.com](http://www.signalchem.com)

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