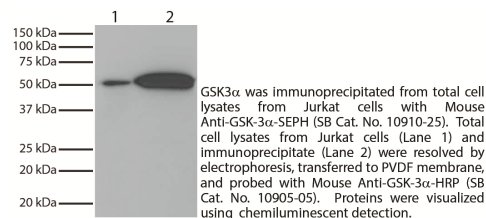




## Mouse Anti-GSK-3 $\alpha$

Cat. No.	Format	Size
10910-01	Purified (UNLB)	0.1 mg
10910-05	Horseradish Peroxidase (HRP)	1.0 mL
10910-25	Sepharose <sup>®</sup> 4B (SEPH)	50 tests



### Overview

<b>Clone</b>	SBGSK3 $\alpha$ 4
<b>Isotype</b>	Mouse (BALB/c) IgG <sub>2a</sub> K
<b>Immunogen</b>	Recombinant N-terminal GSK-3 $\alpha$
<b>Specificity</b>	Human/Mouse GSK-3 $\alpha$
<b>Alternate Name(s)</b>	Glycogen synthase kinase-3 alpha

### Description

Glycogen synthase kinase-3 (GSK-3) is a protein serine kinase that phosphorylates glycogen synthase and thereby inactivates it. Insulin stimulates the dephosphorylation of glycogen synthase at the sites phosphorylated by GSK-3 and subsequently inhibits GSK-3 acutely leading to the stimulation of glycogen synthesis. GSK-3 signaling is performed by two isoforms, GSK-3 $\alpha$  and GSK-3 $\beta$ . The two isoforms share 97% sequence similarity within their catalytic domains. GSK-3 has also been shown to play a role in protein synthesis, cell adhesion, cell proliferation, cell differentiation, microtubule dynamics, and cell motility.

### Applications

WB – Quality tested <sup>3</sup>  
 IP – Quality tested <sup>1,2</sup>

### Working Dilutions

<b>Immunoblotting</b>	Purified (UNLB) antibody	$\leq 2 \mu\text{g/mL}$
	HRP conjugate	1:2,000 – 1:5,000
<b>Immunoprecipitation</b>	Purified (UNLB) antibody	5 $\mu\text{g}$
	SEPH conjugate	40 $\mu\text{L}$
<b>Other Applications</b>	Since applications vary, you should determine the optimum working dilution for the product that is appropriate for your specific need.	

**For Research Use Only. Not for Diagnostic or Therapeutic Use.**

Corporate Offices: 160 Oxmoor Blvd • Birmingham, AL 35209 • USA Mailing Address: P.O. Box 26221 • Birmingham, AL 35260 • USA

Tel: 205.945.1774 • U.S. and Canada: 800.722.2255 • Fax: 205.945.8768

Email: [info@southernbiotech.com](mailto:info@southernbiotech.com) • Website: [www.southernbiotech.com](http://www.southernbiotech.com)

## Handling and Storage

---

- The purified (UNLB) antibody is supplied as 0.1 mg of purified immunoglobulin in 0.2 mL of borate buffered saline, pH 8.2. *No preservatives or amine-containing buffer salts added.* Store at 2-8°C.
- The horseradish peroxidase (HRP) conjugate is supplied as 1.0 mL in a stock solution of 50% glycerol/50% PBS, pH 7.4. No preservative added. Store at 2-8°C or long-term at -20°C.
- The Sepharose<sup>®</sup> 4B (SEPH) conjugate is supplied as 50 tests in 2.0 mL of borate buffered saline, pH 8.2. *No preservatives or amine-containing buffer salts added.* Store at 2-8°C. Shake well before use.
- Reagents are stable for the period shown on the label if stored as directed.

## References

---

1. Meares GP, Zmijewska AA, Jope RS. HSP105 interacts with GRP78 and GSK3 and promotes ER stress-induced caspase-3 activation. *Cell Signal.* 2008;20:347-58. (IP)
2. Sun M, Song L, Li Y, Zhou T, Jope RS. Identification of an antiapoptotic protein complex at death receptors. *Cell Death Differ.* 2008;15:1887-1900. (IP)
3. SouthernBiotech published data

Sepharose<sup>®</sup> is a registered trademark of GE Healthcare.

TB10910  
27-Nov-17