

Store at
-20°C
#18549

Phospho-GSK-3 β (Ser9) Matched Antibody Pair



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Species Cross Reactivity: H M R Mk
UniProt ID: #P49841
Entrez-Gene Id: #2932

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For Research Use Only. Not for Use in Diagnostic Procedures.

Product Includes	Product #	Quantity	Isotype/Source
GSK-3 β (3D10) Mouse mAb (BSA and Azide Free)	46835	100 μ g	Mouse IgG2a
Phospho-GSK-3 β (Ser9) (D85E12) XP [®] Rabbit mAb (BSA and Azide Free)	79774	100 μ g	Rabbit IgG

Description

The Phospho-GSK-3 β (Ser9) Matched Antibody Pair is ideal for use with immunoassay technologies and high-throughput ELISA platforms requiring antibody pairs with specialized or custom antibody labeling. Labels include fluorophores, lanthanides, biotin, and beads. Platforms requiring conjugated Matched Antibody Pairs include MSD, Quanterix Simoa, Alpha Technology (AlphaScreen, AlphaLISA, LANCE, HTRF), and Luminex.

Learn how Matched Antibody Pairs move your projects forward, faster at cst-science.com/matched-antibody-pairs.

Specificity/Sensitivity

This kit detects proteins from the indicated species, as determined through in-house testing, but may also detect homologous proteins from other species.

Storage

Store at -20°C. *This product will freeze at -20°C so it is recommended to aliquot into single-use vials to avoid multiple freeze/thaw cycles.* A slight precipitate may be present and can be dissolved by gently vortexing. This will not interfere with antibody performance.

Directions for Use

Matched Antibody Pairs include capture and detection antibodies to non-overlapping epitopes. Optimal dilutions/concentrations should be determined by the end user.

Formulation

Supplied in 1X PBS (10 mM Na₂HPO₄, 3 mM KCl, 2 mM KH₂PO₄, and 140 mM NaCl (pH 7.8)). BSA and Azide Free.

Background

Glycogen synthase kinase-3 (GSK-3) was initially identified as an enzyme that regulates glycogen synthesis in response to insulin (1). GSK-3 is a ubiquitously expressed serine/threonine protein kinase that phosphorylates and inactivates glycogen synthase. GSK-3 is a critical downstream element of the PI3K/Akt cell survival pathway whose activity can be inhibited by Akt-mediated phosphorylation at Ser21 of GSK-3 α and Ser9 of GSK-3 β (2,3). GSK-3 has been implicated in the regulation of cell fate in *Dictyostelium* and is a component of the Wnt signaling pathway required for *Drosophila*, *Xenopus*, and mammalian development (4). GSK-3 has been shown to regulate cyclin D1 proteolysis and subcellular localization (5).

Background References

1. Welsh, G.I. et al. (1996) *Trends Cell Biol* 6, 274-9.
2. Srivastava, A.K. and Pandey, S.K. (1998) *Mol Cell Biochem* 182, 135-41.
3. Cross, D.A. et al. (1995) *Nature* 378, 785-9.
4. Nusse, R. (1997) *Cell* 89, 321-3.
5. Diehl, J.A. et al. (1998) *Genes Dev* 12, 3499-511.

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