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**GSK-3 β (D5C5Z) XP[®] Rabbit mAb
(PE Conjugate)****Cell Signaling**
TECHNOLOGY[®]**Orders:** 877-616-CELL (2355)
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For Research Use Only. Not for Use in Diagnostic Procedures.

Applications: FC-FP	Reactivity: H M R Mk	Sensitivity: Endogenous	Source/Isotype: Rabbit IgG	UniProt ID: #P49841	Entrez-Gene Id: 2932
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Product Usage Information	Application Flow Cytometry (Fixed/Permeabilized)	Dilution 1:50
Storage	Supplied in PBS (pH 7.2), less than 0.1% sodium azide and 2 mg/ml BSA. Store at 4°C. Do not aliquot the antibodies. Protect from light. Do not freeze.	
Specificity / Sensitivity	GSK-3 β (D5C5Z) XP [®] Rabbit mAb (PE Conjugate) recognizes endogenous levels of total GSK-3 β protein. This antibody does not cross-react with GSK-3 α protein.	
Source / Purification	Monoclonal antibody is produced by immunizing animals with recombinant protein specific to the carboxy terminus of human GSK-3 β protein.	
Product Description	This Cell Signaling Technology antibody is conjugated to phycoerythrin (PE) and tested in-house for direct flow cytometry analysis in rat cells. This antibody is expected to exhibit the same species cross-reactivity as the unconjugated GSK-3 β (D5C5Z) XP [®] Rabbit mAb #12456.	
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 <i>Dictyostelium</i> and is a component of the Wnt signaling pathway required for <i>Drosophila</i> , <i>Xenopus</i> , and mammalian development (4). GSK-3 has been shown to regulate cyclin D1 proteolysis and subcellular localization (5).	
Background References	<ol style="list-style-type: none"> 1. Welsh, G.I. et al. (1996) <i>Trends Cell Biol</i> 6, 274-9. 2. Srivastava, A.K. and Pandey, S.K. (1998) <i>Mol Cell Biochem</i> 182, 135-41. 3. Cross, D.A. et al. (1995) <i>Nature</i> 378, 785-9. 4. Nusse, R. (1997) <i>Cell</i> 89, 321-3. 5. Diehl, J.A. et al. (1998) <i>Genes Dev</i> 12, 3499-511. 	

Species Reactivity	Species reactivity is determined by testing in at least one approved application (e.g., western blot).
Applications Key	FC-FP: Flow Cytometry (Fixed/Permeabilized)
Cross-Reactivity Key	H: human M: mouse R: rat Hm: hamster Mk: monkey Vir: virus Mi: mink C: chicken Dm: D. melanogaster X: <i>Xenopus</i> Z: zebrafish B: bovine Dg: dog Pg: pig Sc: <i>S. cerevisiae</i> Ce: <i>C. elegans</i> Hr: horse GP: Guinea Pig Rab: rabbit All: all species expected
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