



Orders: 877-616-CELL (2355)  
orders@cellsignal.com

Support: 877-678-TECH (8324)

Web: info@cellsignal.com  
cellsignal.com

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

Store at -20C  
#9646

## Phospho-Akt Substrate (RXXS\*/T\*) (110B7E) Rabbit mAb (Sephacrose® Bead Conjugate)

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

Applications:	Reactivity:	Sensitivity:	Source/Isotype:
IP	All	Endogenous	Rabbit IgG
<b>Product Usage Information</b>	<b>Application</b>	<b>Dilution</b>	
	Immunoprecipitation	1:20	
<b>Storage</b>	Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol. Store at -20°C. Do not aliquot the antibodies.		
<b>Specificity/Sensitivity</b>	Phospho-(Ser/Thr) Akt Substrate Motif (RXXS*/T*) (110B7) Rabbit mAb (Sephacrose® Bead Conjugate) recognizes peptides and proteins containing phospho-serine/threonine preceded by arginine at the -3 position. There is some preference observed for peptides that contain phospho-serine/threonine preceded by arginine at both positions -5 and -3. (U.S. Patent No's.: 6,441,140; 6,982,318; 7,259,022; 7,344,714; U.S.S.N. 11,484,485; and all foreign equivalents.)		
<b>Source / Purification</b>	Monoclonal antibody is produced by immunizing animals with synthetic phospho-Akt substrate peptides.		
<b>Description</b>	This Cell Signaling Technology antibody is immobilized via covalent binding of primary amino groups to N-hydroxysuccinimide (NHS)-activated Sephacrose® beads. Phospho-Akt Substrate (RXXS*/T*) (110B7E) Rabbit mAb (Sephacrose® Bead Conjugate) is useful for the immunoprecipitation of phosphorylated Akt substrate proteins.		
<b>Background</b>	An important class of kinases, referred to as Arg-directed kinases or AGC-family kinases, includes cAMP-dependent protein kinase (PKA), cGMP-dependent protein kinase (PKG), protein kinase C, Akt, and RSK. These kinases share a substrate specificity characterized by Arg at position -3 relative to the phosphorylated Ser or Thr (1,2). Akt plays a central role in mediating critical cellular responses including cell growth and survival, angiogenesis, and transcriptional regulation (3-5). While a number of Akt substrates are known (such as GSK-3, Bad, and caspase-9) many important substrates await discovery. Akt phosphorylates substrates only at Ser/Thr in a conserved motif characterized by Arg at positions -5 and -3 (6). Phospho-Akt substrate-specific antibodies from Cell Signaling Technology are powerful tools for investigating the regulation of phosphorylation by Akt and other Arg-directed kinases, as well as for high throughput kinase drug discovery.		
<b>Background References</b>	<ol style="list-style-type: none"> <li>1. Montminy, M. (1997) <i>Annu Rev Biochem</i> 66, 807-22.</li> <li>2. Pearson, R.B. and Kemp, B.E. (1991) <i>Methods Enzymol</i> 200, 62-81.</li> <li>3. Marte, B.M. and Downward, J. (1997) <i>Trends Biochem Sci</i> 22, 355-8.</li> <li>4. Jiang, B.H. et al. (2000) <i>Proc Natl Acad Sci USA</i> 97, 1749-53.</li> <li>5. Scheid, M.P. and Woodgett, J.R. (2000) <i>Curr Biol</i> 10, R191-4.</li> <li>6. Alessi, D.R. et al. (1996) <i>FEBS Lett</i> 399, 333-8.</li> </ol>		
<b>Species Reactivity</b>	Species reactivity is determined by testing in at least one approved application (e.g., western blot).		
<b>Applications Key</b>	<b>IP:</b> Immunoprecipitation		
<b>Cross-Reactivity Key</b>	<b>All:</b> All Species Expected		
<b>Trademarks and Patents</b>	Cell Signaling Technology is a trademark of Cell Signaling Technology, Inc.  All other trademarks are the property of their respective owners. Visit <a href="http://cellsignal.com/trademarks">cellsignal.com/trademarks</a> for more information.		
<b>Limited Uses</b>	Except as otherwise expressly agreed in a writing signed by a legally authorized representative of CST, the following terms apply to Products provided by CST, its affiliates or its distributors. Any Customer's terms and conditions that are in addition to, or different from, those contained herein, unless separately accepted in writing by a legally authorized representative of CST, are rejected and are of no		

force or effect.

Products are labeled with For Research Use Only or a similar labeling statement and have not been approved, cleared, or licensed by the FDA or other regulatory foreign or domestic entity, for any purpose. Customer shall not use any Product for any diagnostic or therapeutic purpose, or otherwise in any manner that conflicts with its labeling statement. Products sold or licensed by CST are provided for Customer as the end-user and solely for research and development uses. Any use of Product for diagnostic, prophylactic or therapeutic purposes, or any purchase of Product for resale (alone or as a component) or other commercial purpose, requires a separate license from CST. Customer shall (a) not sell, license, loan, donate or otherwise transfer or make available any Product to any third party, whether alone or in combination with other materials, or use the Products to manufacture any commercial products, (b) not copy, modify, reverse engineer, decompile, disassemble or otherwise attempt to discover the underlying structure or technology of the Products, or use the Products for the purpose of developing any products or services that would compete with CST products or services, (c) not alter or remove from the Products any trademarks, trade names, logos, patent or copyright notices or markings, (d) use the Products solely in accordance with CST Product Terms of Sale and any applicable documentation, and (e) comply with any license, terms of service or similar agreement with respect to any third party products or services used by Customer in connection with the Products.