

**Anti-Akt (Ser-473), Phosphospecific Antibody**  
Catalog # AN1625**Specification****Anti-Akt (Ser-473), Phosphospecific Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">P31749</a>
Reactivity	Bovine
Host	Mouse
Clonality	Mouse Monoclonal
Isotype	IgG1
Calculated MW	55686

**Anti-Akt (Ser-473), Phosphospecific Antibody - Additional Information**

Gene ID	207
<b>Other Names</b>	
PKBalpha, PKB, AKT	

**Target/Specificity**

Akt (PKB, Rac kinase) is a 60kDa ser/thr kinase critical for controlling diverse cellular functions, including glucose metabolism, gene transcription, cell proliferation, and apoptosis. Akt phosphorylates a number of substrates including MBP, glycogen synthetase, PKA RII subunit, and histone H1. Akt is activated in response to insulin and growth factors in a PI3-kinase dependent manner. Activation of PI3-Kinase generates phosphatidylinositol 3,4-bisphosphate, which induces membrane translocation of Akt coincident with its phosphorylation at Thr-308 and Ser-473. Upon activation, Akt associates with members of the PKC family of kinases, such as PKC $\delta$  and PKC $\zeta$ . Ceramide-activated PKC $\zeta$  leads to phosphorylation of Thr-34 within the pleckstrin homology domain of Akt. This phosphorylation inhibits PIP3 binding to Akt preventing activation of the kinase and may lead to ceramide-induced cell death.

**Format**

Protein G Purified

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

Anti-Akt (Ser-473), Phosphospecific Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Shipping**

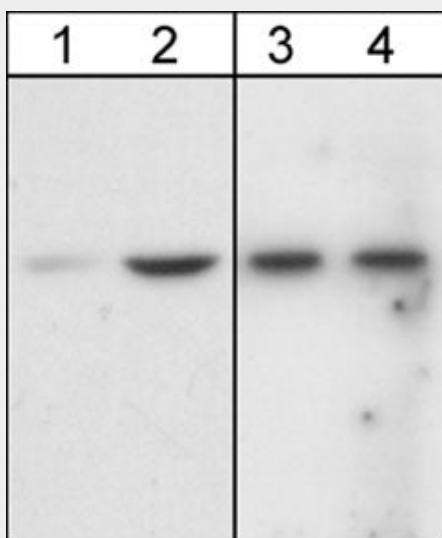
Blue Ice

**Anti-Akt (Ser-473), Phosphospecific Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### Anti-Akt (Ser-473), Phosphospecific Antibody - Images



Western blot analysis of A431 cells untreated (lanes 1 & 3) or treated with 100 ng/ml EGF for 60 min. (lanes 2 & 4). The blots were probed with monoclonal anti-phospho-Akt (Ser-473) (lanes 1 & 2) and monoclonal anti-Akt1 (N-terminal region) (lanes 3 & 4).

#### Anti-Akt (Ser-473), Phosphospecific Antibody - Background

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