

**Anti-AKT (Thr342) Antibody**

**Our Anti-AKT (Thr342) rabbit polyclonal phosphospecific primary antibody from PhosphoSolutions is pr  
Catalog # AN1307**

**Specification**

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**Anti-AKT (Thr342) Antibody - Product Information**

Primary Accession	<a href="#">Q8INB9</a>
Host	<b>Rabbit</b>
Clonality	<b>Polyclonal</b>
Isotype	<b>IgG</b>
Calculated MW	<b>68485</b>

**Anti-AKT (Thr342) Antibody - Additional Information**

Gene ID **41957**

**Other Names**

AKT1 antibody, AKT1\_HUMAN antibody, AKT2 antibody, AKT3 antibody, PKB alpha antibody, PKB antibody, PKB beta antibody, PKBalpha antibody, PRKBA antibody, PRKBB antibody, PRKBG antibody, Protein kinase B antibody, Protein kinase B beta antibody, Protein kinase B gamma antibody, Proto-oncogene c-Akt antibody, RAC alpha antibody, RAC antibody, RAC gamma antibody, RAC PK alpha antibody, RAC PK beta antibody, RAC PK gamma antibody, RAC-alpha serine/threonine-protein kinase antibody, RAC-PK-alpha antibody, STK2 antibody

**Target/Specificity**

The serine/threonine kinase Akt also known as protein kinase B (PKB) or Rac, plays a crucial role in controlling many diverse and important cellular functions such as cell survival and glycogen metabolism (Hajduch et al., 2001 and Nicholson & Anderson, 2002). Three isoforms ( $\alpha$ ,  $\beta$ , and  $\gamma$ ) have been identified that can be activated rapidly in response to insulin and growth factors in a phosphoinositide 3-kinase (PI3K)-dependent fashion (Hajduch et al., 2003). Phosphorylation of Akt $\alpha$  occurs at two specific regulatory sites in Drosophila, one localized in the kinase domain, Thr342, and the other in the C-terminal regulatory domain, Ser505: these two activation sites are homologous to mammalian Ser473 and Thr308 respectively (Powell et al., 2004).

**Format**

Antigen Affinity Purified from Pooled Serum

**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 (Thr342) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Shipping**

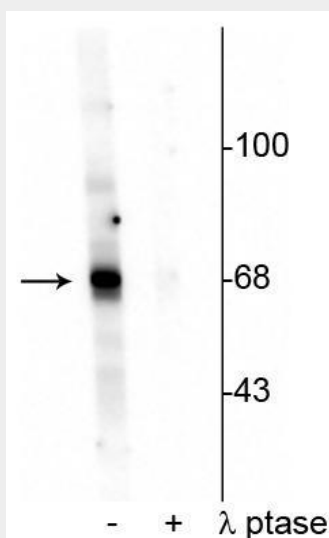
Blue Ice

## Anti-AKT (Thr342) 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 (Thr342) Antibody - Images



Western blot of Drosophila lysate showing specific labeling of the ~68 kDa AKT protein phosphorylated at Thr342 in the first lane (-). Phosphospecificity is shown in the second lane (+) where the immunolabeling is completely eliminated by blot treatment with lambda phosphatase (λ-Ptase, 1200 units for 30 minutes).

## Anti-AKT (Thr342) Antibody - Background

The serine/threonine kinase Akt also known as protein kinase B (PKB) or Rac, plays a crucial role in controlling many diverse and important cellular functions such as cell survival and glycogen metabolism (Hajduch et al., 2001 and Nicholson & Anderson, 2002). Three isoforms (α, β, and γ) have been identified that can be activated rapidly in response to insulin and growth factors in a phosphoinositide 3-kinase (PI3K)-dependent fashion (Hajduch et al., 2003). Phosphorylation of Aktα occurs at two specific regulatory sites in Drosophila, one localized in the kinase domain, Thr342, and the other in the C-terminal regulatory domain, Ser505: these two activation sites are homologous to mammalian Ser473 and Thr308 respectively (Powell et al., 2004).