

Anti-AKT (Thr342) Antibody

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

Product Information

Application	WB
Primary Accession	Q8INB9
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	68485

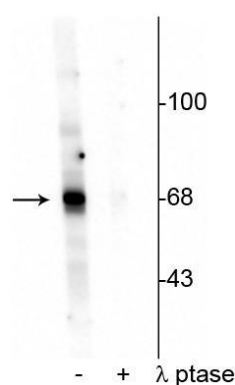
Additional Information

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 (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 Akt 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).
Dilution	WB~1:1000
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

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 Akt α 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).

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).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.