

## Product datasheet for **TA388990**

### Phospho-AKT1 (pThr342) Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	WB
Recommended Dilution:	<b>WB:</b> 1:500
Reactivity:	Drosophila
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Synthetic phospho-peptide corresponding to amino acid residues surrounding Thr342 of Drosophila AKT, conjugated to keyhole limpet hemocyanin (KLH)
Specificity:	Specific for endogenous levels of the ~68 kDa AKT protein phosphorylated at Thr342. Immunolabeling is completely eliminated with $\lambda$ -phosphatase treatment. It has been reported that this antibody may also recognize some level of phosphorylated S6K as there is 67% homology with the sequence used as antigen.
Formulation:	10 mM HEPES (pH 7.5), 150 mM NaCl, 100 $\mu$ g per ml BSA and 50% glycerol.
Concentration:	lot specific
Purification:	Antigen Affinity Purified from Pooled Serum
Conjugation:	Unconjugated
Storage:	Storage at -20°C is recommended, as aliquots may be taken without freeze/thawing due to presence of 50% glycerol. Stable for at least 1 year at -20°C.
Stability:	After date of receipt, stable for at least 1 year at -20°C.
Predicted Protein Size:	68



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**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 ( $\alpha$ ,  $\beta$ , 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).

**Note:**

Prepared from pooled rabbit serum by affinity purification via sequential chromatography on phospho and non-phosphopeptide affinity columns.