

## Product datasheet for **TA326431**

### **AKT2 Rabbit Polyclonal Antibody [Clone ID: N/A]**

#### **Product data:**

<b>Product Type:</b>	Primary Antibodies
<b>Clone Name:</b>	N/A
<b>Applications:</b>	WB
<b>Recommended Dilution:</b>	1:3000 dilution was sufficient for detection of PKB $\beta$ in 20ug of HeLa cell lysate by ECL immunoblot analysis.
<b>Reactivity:</b>	Human, Mouse, Rat, Bovine, Chicken, Dog, Guinea Pig, Hamster, Rabbit, Monkey, Pig, Sheep, Xenopus
<b>Host:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>Immunogen:</b>	A five residue synthetic peptide based on the human Akt2, coupled to KLH
<b>Formulation:</b>	TBS, 50% glycerol, 0.09% sodium azide
<b>Concentration:</b>	lot specific
<b>Purification:</b>	Affinity Purified
<b>Conjugation:</b>	Unconjugated
<b>Storage:</b>	Store at -20°C as received.
<b>Stability:</b>	Stable for 12 months from date of receipt.
<b>Gene Name:</b>	AKT serine/threonine kinase 2
<b>Database Link:</b>	<a href="#">NP_001617</a> <a href="#">Entrez Gene 11652 Mouse</a> <a href="#">Entrez Gene 25233 Rat</a> <a href="#">Entrez Gene 449021 Dog</a> <a href="#">Entrez Gene 700591 Monkey</a> <a href="#">Entrez Gene 208 Human</a> <a href="#">P31751</a>



[View online »](#)

**Background:**

Protein kinase B or Akt (PKB/Akt) is a serine/threonine kinase, which in mammals comprises three highly homologous members known as PKB alpha (Akt1), PKB beta (Akt2) and PKB gamma (Akt3). PKB/Akt is a growth-factor-regulated protein kinase which contains a Pleckstrin Homology (PH) domain which might be important for dimerization of the kinase. Binding of phosphoinositide 3-OH kinase products to the pleckstrin homology domain results in translocation of PKB/Akt to the plasma membrane where it is activated by phosphorylation by upstream kinases including the phosphoinositide-dependent kinase 1 (PDK1) and PDK2. Myelin basic protein and histone H2B are in vitro substrates for PKB, while glycogen synthase kinase-3 has been implicated as a physiological target. Key roles for this enzyme can be found in cellular processes such as glucose metabolism, cell proliferation, apoptosis, transcription and cell migration.

**Synonyms:**

HIHGHH; PKBB; PKBBETA; PRKBB; RAC-BETA

**Note:**

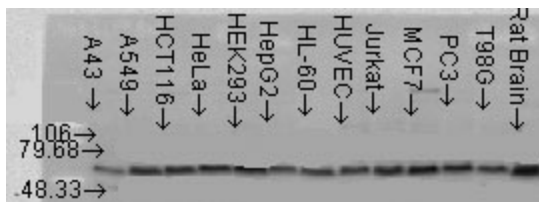
Detects a 65kDa protein, corresponding to the molecular mass of Akt2 PKB $\beta$  on SDS PAGE immunoblots. Does not react with PKBa (Akt1) or PKB $\gamma$  (Akt3).

**Protein Families:**

Druggable Genome, ES Cell Differentiation/IPS, Protein Kinase

**Protein Pathways:**

Acute myeloid leukemia, Adipocytokine signaling pathway, Apoptosis, B cell receptor signaling pathway, Chemokine signaling pathway, Chronic myeloid leukemia, Colorectal cancer, Endometrial cancer, ErbB signaling pathway, Fc epsilon RI signaling pathway, Fc gamma R-mediated phagocytosis, Focal adhesion, Glioma, Insulin signaling pathway, Jak-STAT signaling pathway, MAPK signaling pathway, Melanoma, mTOR signaling pathway, Neurotrophin signaling pathway, Non-small cell lung cancer, Pancreatic cancer, Pathways in cancer, Progesterone-mediated oocyte maturation, Prostate cancer, Renal cell carcinoma, Small cell lung cancer, T cell receptor signaling pathway, Tight junction, Toll-like receptor signaling pathway, VEGF signaling pathway

**Product images:**

Western blot analysis of AKT2 (PKBbeta) in cell line mix using a 1:1000 dilution of the antibody