

### **Akt3 Polyclonal Antibody**

Catalog # AP63399

### **Specification**

## **Akt3 Polyclonal Antibody - Product Information**

Application WB
Primary Accession Q9Y243

Reactivity Human, Mouse, Rat

Host Rabbit Clonality Polyclonal

# **Akt3 Polyclonal Antibody - Additional Information**

**Gene ID 10000** 

### **Other Names**

AKT3; PKBG; RAC-gamma serine/threonine-protein kinase; Protein kinase Akt-3; Protein kinase B gamma; PKB gamma; RAC-PK-gamma; STK-2

**Dilution** 

WB~~WB: 1:1000-2000

**Format** 

PBS, pH 7.4, containing 0.09% (W/V) sodium azide as Preservative and 50% Glycerol.

**Storage Conditions** 

-20°C

### **Akt3 Polyclonal Antibody - Protein Information**

Name AKT3

**Synonyms PKBG** 

#### **Function**

AKT3 is one of 3 closely related serine/threonine-protein kinases (AKT1, AKT2 and AKT3) called the AKT kinase, and which regulate many processes including metabolism, proliferation, cell survival, growth and angiogenesis. This is mediated through serine and/or threonine phosphorylation of a range of downstream substrates. Over 100 substrate candidates have been reported so far, but for most of them, no isoform specificity has been reported. AKT3 is the least studied AKT isoform. It plays an important role in brain development and is crucial for the viability of malignant glioma cells. AKT3 isoform may also be the key molecule in up-regulation and down-regulation of MMP13 via IL13. Required for the coordination of mitochondrial biogenesis with growth factor-induced increases in cellular energy demands. Down- regulation by RNA interference reduces the expression of the phosphorylated form of BAD, resulting in the induction of caspase- dependent apoptosis.

## **Cellular Location**



Nucleus. Cytoplasm. Membrane; Peripheral membrane protein Note=Membrane-associated after cell stimulation leading to its translocation

#### **Tissue Location**

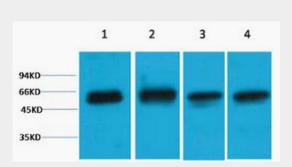
In adult tissues, it is highly expressed in brain, lung and kidney, but weakly in heart, testis and liver. In fetal tissues, it is highly expressed in heart, liver and brain and not at all in kidney

## **Akt3 Polyclonal Antibody - Protocols**

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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# **Akt3 Polyclonal Antibody - Images**



Western blot analysis of 1) Hela, 2) 3T3, 3) Mouse Brain, 4) Rat Brain tissue, diluted at 1:2000.. Secondary antibody was diluted at 1:20000

## **Akt3 Polyclonal Antibody - Background**

AKT3 is one of 3 closely related serine/threonine- protein kinases (AKT1, AKT2 and AKT3) called the AKT kinase, and which regulate many processes including metabolism, proliferation, cell survival, growth and angiogenesis. This is mediated through serine and/or threonine phosphorylation of a range of downstream substrates. Over 100 substrate candidates have been reported so far, but for most of them, no isoform specificity has been reported. AKT3 is the least studied AKT isoform. It plays an important role in brain development and is crucial for the viability of malignant glioma cells. AKT3 isoform may also be the key molecule in up-regulation and down-regulation of MMP13 via IL13. Required for the coordination of mitochondrial biogenesis with growth factor-induced increases in cellular energy demands. Down-regulation by RNA interference reduces the expression of the phosphorylated form of BAD, resulting in the induction of caspase-dependent apoptosis.