

**Akt3 Antibody**  
**Rabbit Polyclonal Antibody**  
**Catalog # ABV10135****Specification**

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**Akt3 Antibody - Product Information**

Application	WB, IHC, E
Primary Accession	<a href="#">O9Y243</a>
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	55775

**Akt3 Antibody - Additional Information****Gene ID** 10000**Application & Usage**

The antibody can be used for ELISA (0.25 µg/ml), Western Blotting (0.5 - 2.5 µg/ml) and Immunohistochemistry (2.5 - 5.0 µg/ml).

**Other Names**

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

**Target/Specificity**

Akt3

**Antibody Form**

Liquid

**Appearance**

Colorless liquid

**Formulation**

100 µg (0.25 mg/ml) purified rabbit Ig polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide.

**Handling**

The antibody solution should be gently mixed before use.

**Reconstitution & Storage**

-20 °C

**Background Descriptions****Precautions**

Akt3 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## **Akt3 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 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](#)

## **Akt3 Antibody - Images**

## **Akt3 Antibody - Background**

AKT3 is a member of the AKT, also called PKB, serine/threonine protein kinase family. AKT kinases are known to be regulators of cell signaling in response to insulin and growth factors. They are involved in a wide variety of biological processes including cell proliferation, differentiation, apoptosis, tumorigenesis, as well as glycogen synthesis and glucose uptake. This kinase has been shown to be stimulated by platelet-derived growth factor (PDGF), insulin, and insulin-like growth factor 1 (IGF1).