

Akt3 Antibody
Rabbit Polyclonal Antibody
Catalog # ABV10133**Specification**

Akt3 Antibody - Product Information

Application	WB, IHC, E
Primary Accession	O9Y243
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).
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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).