

**Akt3, Active recombinant protein**  
**Akt, RAC-alpha serine/threonine-protein kinase**  
**Catalog # PBV11279r****Specification**

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**Akt3, Active recombinant protein - Product info**

Primary Accession	<a href="#">O9Y243</a>
Concentration	<b>0.1</b>
Calculated MW	<b>~84.0 kDa KDa</b>

**Akt3, Active recombinant protein - Additional Info**

Gene ID	<b>10000</b>
Gene Symbol	<b>AKT3</b>
<b>Other Names</b>	
Akt, RAC-alpha serine/threonine-protein kinase	
Source	<b>Baculovirus (Sf9 insect cells)</b>
Assay&Purity	<b>SDS-PAGE; ≥90%</b>
Assay2&Purity2	<b>HPLC;</b>
Recombinant	<b>Yes</b>
<b>Format</b>	
Liquid	

**Storage**

-80°C; Recombinant proteins in storage buffer (50 mM Tris-HCl, pH 7.5, 150 mM NaCl, 0.25 mM DTT, 0.1 mM EGTA, 0.1 mM EDTA, 0.1 mM PMSF, 25% glycerol).

**Akt3, Active recombinant protein - 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, Active recombinant protein - Images****Akt3, Active recombinant protein - Background**

Akt3 or Protein Kinase B γ (PKB) is a serine/threonine kinase that is a member of the Akt family. In mammals, the Akt family comprises of three highly homologous members known as Akt1 (PKB), Akt2 (PKB), and Akt 3. Akt 3 like the other family members is activated in cells exposed to diverse stimuli such as hormones, growth factors, and extracellular matrix components. The activation

mechanism remains to be fully characterized but occurs downstream of phosphoinositide 3-kinase (PI3K). PI3K generates phosphatidylinositol-3,4,5-trisphosphate (PIP3), a lipid second messenger essential for the translocation of Akt family members to the plasma membrane where they are phosphorylated and activated by phosphoinositide-dependent kinase-1 (PDK-1) and phosphoinositide-dependent kinase-2 (PDK-2 possibly ILK). Akt 3 like the other family members phosphorylates and regulates the function of many cellular proteins involved in processes that include cellular metabolism, survival/apoptosis, and proliferation. Recent evidence indicates that Akt 3 is frequently overexpressed in many types of human cancers including breast and prostate. Although the mechanisms have not yet been fully characterized, increased expression and activation of Akt is believed to promote cell proliferation and survival thereby contributing to cancer progression.