

Akt2, Active recombinant protein
Akt, RAC-alpha serine/threonine-protein kinase
Catalog # PBV11278r**Specification**

Akt2, Active recombinant protein - Product info

Primary Accession	P31751
Concentration	0.1
Calculated MW	58.0 kDa KDa

Akt2, Active recombinant protein - Additional Info

Gene ID	208
Gene Symbol	AKT2

Other Names

Akt, RAC-alpha serine/threonine-protein kinase

Source	Baculovirus (Sf9 insect cells)
Assay&Purity	SDS-PAGE; ≥90%
Assay2&Purity2	HPLC;
Recombinant	Yes

Format

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).

Akt2, 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](#)

Akt2, Active recombinant protein - Images**Akt2, Active recombinant protein - Background**

Akt2 or Protein Kinase B β (PKB β) is a serine/threonine kinase that is a member of the Akt family. Akt2 like the other Akt members is activated in cells in response to diverse stimuli such as hormones, growth factors and extracellular matrix components and is involved in glucose metabolism, transcription, survival, cell proliferation, angiogenesis, and cell motility (1). The PI3K

generates phosphatidylinositol-3, 4, 5-trisphosphate (PIP3), a lipid second messenger essential for the translocation of Akt2 to the plasma membrane where it is phosphorylated and activated by phosphoinositide-dependent kinase-1 (PDK-1) (2) and phosphoinositide-dependent kinase-2. Akt1 has numerous cellular substrates including proteins, which promote the inhibition of apoptosis such as the Forkhead transcription factors and the Bcl-2 family member Bad (3).

Akt2, Active recombinant protein - References

Jones P.F.,et al.Cell Regul. 2:1001-1009(1991).
Cheng J.Q.,et al.Proc. Natl. Acad. Sci. U.S.A. 89:9267-9271(1992).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Grimwood J.,et al.Nature 428:529-535(2004).
Walker K.S.,et al.Biochem. J. 331:299-308(1998).