## [pSer473]Akt monoclonal antibody (11E6)

This antibody is covered by our Worry-Free Guarantee.

**Ordering Information** 

Order Online »

ALX-804-401-C100

100µg

Manuals, SDS & CofA

**View Online** »

## **Handling & Storage**

**Use/Stability** Stable at -80°C up to 1 year, at 4°C up to 3 months.

Handling Avoid freeze/thaw cycles. After reconstitution, prepare aliquots and freeze in liquid

nitrogen.

Long Term Storage -20°C

Shipping Blue Ice

## Regulatory Status RUO - Research Use Only

## **Product Details**

Alternative Name Protein kinase B, PKB

**Application** ELISA, Flow Cytometry, IHC, IP, WB

Clone 11E6

Crossreactivity Does not cross-react with dephosphorylated Akt or other unrelated serine-

phosphorylated proteins.

**Formulation** Lyophilized from 1ml of 2x PBS containing 0.09% sodium azide, PEG, and sucrose.

**Host** Mouse

Immunogen Synthetic peptide corresponding to C-terminal (PQFpSYSA) of human Akt (protein

kinase B; PKB) phosphorylated at Ser473 conjugated to KLH.

**Isotype** IgG1

Positive Control Included. (Prod. No. ALX-840-025)

**Purity Detail** Thiophilic adsorption and size exclusion chromatography purified.

Recommendation

Dilutions/Conditions

Flow Cytometry (intracellular staining, 2µg/ml)Immunohistochemistry (a starting dilution of 5µg/ml is recommended)Western Blot (0.5µg/ml for HRPO/ECL detection;

recommended blocking buffer CPPT: 10mM TRIS-HCl, pH 7.4, 0.5% (w/v) casein, 1% (w/v) PEG 4,000, 1% (w/v) polyvinylpyrrolidone, 0.1% (v/v) Tween 20, 150mM sodium chloride)Suggested dilutions/conditions may not be available for all applications.Optimal

conditions must be determined individually for each application.

**Reconstitution** Reconstitute with 1ml water (15 minutes at room temperature).

Species Reactivity Dog, Human, Mouse, Rat

**Specificity** Recognizes Ser<sup>472/473/474</sup>-phosphorylated Akt (see technical note).

Technical Info / Product Notes

**Technical Note**: There are three mammalian isoforms of Akt: Akt1 (PKBa), Akt2 (PKBb), and Akt3 (PKBg). Akt1 shares 81% and 83% amino acid identity with Akt2 and Akt3, respectively. Although the three isoforms show broad tissue distribution, Akt1 is the most ubiquitously expressed. Akt2 is expressed at a lower level than Akt1 except in insulin-responsive tissues where it predominates. In particular, Akt2 is more abundant and more highly activated than Akt1 in adipocytes. Akt3 is expressed at the lowest level except in testes and brain. The C-terminal sequence of the three isoforms are shown below. Note that the phosphorylation site slightly differs between the three isoforms. Thus the phosphorylation site Ser<sup>473</sup> of Akt1 corresponds to Ser<sup>474</sup> in Akt2 and Ser<sup>472</sup> in Akt3 respectively.

Akt1: V<sup>461</sup>DSERRPHFPQFS<sup>473</sup>YSASSTA<sup>480</sup> UniProt ID <u>P31749</u> Akt2: L<sup>461</sup>LELDQRTHFPQFS<sup>474</sup>YSASIRE<sup>481</sup> UniProt ID <u>P31751</u> Akt3: D<sup>461</sup>NERRPHFPQFS<sup>472</sup>YSASGRE<sup>479</sup> UniProt ID <u>Q9Y243</u>

Replacement for ADI-905-658

UniProt ID P31749 (Akt1), P31751 (Akt2), Q9Y243 (Akt3)

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