[pSer473]Akt monoclonal antibody (11E6)

This antibody is covered by our Worry-Free Guarantee.

Manuals, SDS & CofA

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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 $Ser^{472/473/474}$-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^{473} of Akt1 corresponds to Ser^{474} in Akt2 and Ser^{472} in Akt3 respectively. Akt1: V^{461}DSERRPHFPQFS^{473}YSASSTA^{480} UniProt ID P31749 Akt2: L^{461}LELDQRTHFPQFS^{474}YSASIRE^{481} UniProt ID P31751 Akt3: D^{461}NERRPHFPQFS^{472}YSASGRE^{479} UniProt ID Q9Y243 Replacement for **ADI-905-658**
UniProt ID	P31749 (Akt1), P31751 (Akt2), Q9Y243 (Akt3)
Worry-free Guarantee	**This antibody is covered by our Worry-Free Guarantee .**

Last modified: May 29, 2024

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