

[pSer⁴⁷³]Akt

polyclonal antibody

The Akt (PKB) family of protein kinases are serine/threonine kinases, with three mammalian family members identified to date (Akt1, Akt2, Akt3). Akt is a well-characterized member of PI3 kinase-mediated signaling pathways, regulating cell growth, apoptosis, glycogen synthesis, and other cellular responses through its phosphorylation of downstream substrates. Akt activation is triggered by binding of phospholipid and phosphorylation at two key residues: Thr308 by PDK1, and Ser473 by PDK2, now identified as mTOR. Deregulation of Akt signaling has been associated with cancer, diabetes, and schizophrenia. Akt1 is the cellular homologue of the murine thymoma retroviral oncogene v-akt, and its role in anti-apoptotic and pro-mitotic pathways have made Akt a molecular target for anti-cancer therapeutic intervention. Akt activation inhibits apoptosis by phosphorylating the Bcl-2 related protein Bad, and increases p53 degradation by phosphorylating mdm2. Mitotic substrates of Akt include GSK-3 β , p21CIP1, and p27KIP1, cell cycle inhibitors negatively regulated by Akt phosphorylation. Akt has been shown to mediate angiogenesis through regulation of thrombospondins, which may cooperate with pro-mitotic and anti-apoptotic functions of Akt to promote tumorigenesis.

This antibody is covered by our [Worry-Free Guarantee](#).

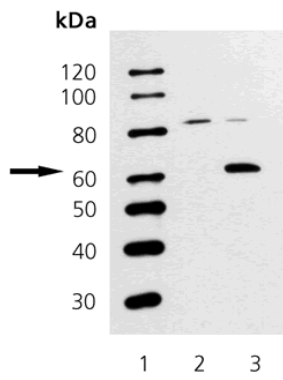
Ordering Information

[Order Online »](#)

ADI-905-773-100	100 μ g
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Manuals, SDS & CofA

[View Online »](#)



Western blot analysis of Akt (phospho-Ser473). Lane 1: MW, Lane 2: 3T3, Lane 3: 3T3 + PDGF

Handling & Storage

Handling Avoid freeze/thaw cycles.

Long Term Storage -20°C

Shipping Blue Ice

Regulatory Status RUO - Research Use Only

Product Details

Alternative Name PKB, Protein kinase B, RAC

Application WB

Application Notes Detects a band of ~60kDa by Western blot.

Crossreactivity Weakly cross-reacts with human, rat, bovine and chicken Akt.

Formulation Liquid. In PBS, pH 7.2, containing 50% glycerol and 0.09% sodium azide.

GenBank ID M63167

Host Rabbit

Immunogen Synthetic peptide corresponding to a portion of human Akt1 phosphorylated at Ser473.

Purity Detail Peptide affinity purified.

Recommendation Western Blot (1µg/ml, ECL)Suggested dilutions/conditions may not be available for all applications.Optimal conditions must be determined individually for each application.

Source Purified from rabbit serum.

Species Reactivity Mouse

UniProt ID P31749

Worry-free Guarantee



ENZO LIFE SCIENCES,
INC.
Phone: 800.942.0430
[info-
usa@enzolifesciences.com](mailto:info-usa@enzolifesciences.com)

European Sales Office
ENZO LIFE SCIENCES
(ELS) AG
Phone: +41 61 926 8989
[info-
eu@enzolifesciences.com](mailto:info-eu@enzolifesciences.com)

Belgium, The Netherlands
& Luxembourg
Phone: +32 3 466 0420
[info-
be@enzolifesciences.com](mailto:info-be@enzolifesciences.com)

France
Phone: +33 472 440 655
[info-
fr@enzolifesciences.com](mailto:info-fr@enzolifesciences.com)

Germany
Phone: +49 7621 5500 526
[info-
de@enzolifesciences.com](mailto:info-de@enzolifesciences.com)

UK & Ireland
Phone (UK customers):
0845 601 1488
Phone: +44 1392 825900
[info-
uk@enzolifesciences.com](mailto:info-uk@enzolifesciences.com)

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