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# Anti-Akt (Thr-34), Phosphospecific Antibody

Catalog # AN1626

## Product Information

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|---|---|
| **Application** | WB |
| **Primary Accession** | P31749 |
| **Host** | Rabbit |
| **Clonality** | Rabbit Polyclonal |
| **Isotype** | IgG |
| **Calculated MW** | 55686 |

## Additional Information

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| **Gene ID** | 207 |
| **Other Names** | PKBalpha, PKB, AKT |
| **Target/Specificity** | Akt (PKB, Rac kinase) is a 60kDa ser/thr kinase critical for controlling diverse cellular functions, including glucose metabolism, gene transcription, cell proliferation, and apoptosis. Akt phosphorylates a number of substrates including MBP, glycogen synthetase, PKA RII subunit, and histone H1. Akt is activated in response to insulin and growth factors in a PI3-kinase dependent manner. Activation of PI3-Kinase generates phosphatidylinositol 3,4-bisphosphate, which induces membrane translocation of Akt coincident with its phosphorylation at Thr-308 and Ser-473. Upon activation, Akt associates with members of the PKC family of kinases, such as PKCδ and PKCζ. Ceramide-activated PKCζ leads to phosphorylation of Thr-34 within the pleckstrin homology domain of Akt. This phosphorylation inhibits PIP3 binding to Akt preventing activation of the kinase and may lead to cermide-induced cell death. |
| **Dilution** | WB~~1:1000 |
| **Format** | Antigen Affinity Purified |
| **Storage** | Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles. |
| **Precautions** | Anti-Akt (Thr-34), Phosphospecific Antibody is for research use only and not for use in diagnostic or therapeutic procedures. |
| **Shipping** | Blue Ice |

## Background

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to insulin and growth factors in a PI3-kinase dependent manner. Activation of PI3-Kinase generates phosphatidylinositol 3,4-bisphosphate, which induces membrane translocation of Akt coincident with its phosphorylation at Thr-308 and Ser-473. Upon activation, Akt associates with members of the PKC family of kinases, such as PKCδ and PKCζ. Ceramide-activated PKCζ leads to phosphorylation of Thr-34 within the pleckstrin homology domain of Akt. This phosphorylation inhibits PIP3 binding to Akt preventing activation of the kinase and may lead to cermide-induced cell death.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.