

# **AKT Polyclonal Antibody**

(Cat. No. A-7417)

## Background

Akt, also known as protein kinase B (PKB), is a serine/threoninespecific protein kinase that participates in several cellular processes such as glucose metabolism, apoptosis, cell proliferation, transcription and cell migration. Activation of Akt is triggered by the binding of phospholipid and phosphorylation at two key residues: Thr308 by PDK1, and Ser473 by PDK2 (mTOR). Akt activation inhibits apoptosis by phosphorylating the Bcl-2 related protein Bad, and increases p53 degradation by phosphorylating mdm2. Akt mitotic substrates include GSK-3 $\beta$ , p21CIP1, and p27KIP1, cell cycle inhibitors negatively regulated by Akt phosphorylation. Akt can mediate angiogenesis through regulation of thrombospondins, which may cooperate with pro-mitotic and anti-apoptotic functions of Akt to promote tumorigenesis. Deregulation of Akt signaling is associated with cancer, diabetes, and schizophrenia.

## Description

Rabbit polyclonal antibody to AKT

### Formulation

Liquid. In PBS containing 50% glycerol and 0.09% sodium azide.

#### Immunogen

Synthetic peptide corresponding to a portion of human Akt. The sequence is completely conserved in rat and bovine.

#### Specificity

Human, Mouse, Rat

## Purification

Protein A- affinity purified

# Storage

Store at -20°C. Avoid multiple freeze/thaw cycles.

## Application

IHC, IP, WB (1:1000, colorimetric)

## Ordering Information

**Products** AKT Polyclonal Antibody



**Fig. 1.** Western blot analysis of AKT Polyclonal Antibody: Lane 1: MW Marker, Lane 2: HeLa Cell Lysate, Lane 3: Mouse Brain Lysate, Lane 4: Rat Brain Lysate.



**Fig. 2.** Immunohistochemistry analysis of human heart tissue stained with AKT Polyclonal Antibody at 10μg/ml.

**Size** 200 μg **Cat. No.** A-7417-200

This product is for research purposes only. Not intended for use in diagnostic procedures.