



Sheep anti-Human AKT1 polyclonal antibody (DPAB-DC884)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Antigen Description

The serine-threonine protein kinase encoded by the AKT1 gene is catalytically inactive in serum-starved primary and immortalized fibroblasts. AKT1 and the related AKT2 are activated by platelet-derived growth factor. The activation is rapid and specific, and it is abrogated by mutations in the pleckstrin homology domain of AKT1. It was shown that the activation occurs through phosphatidylinositol 3-kinase. In the developing nervous system AKT is a critical mediator of growth factor-induced neuronal survival. Survival factors can suppress apoptosis in a transcription-independent manner by activating the serine/threonine kinase AKT1, which then phosphorylates and inactivates components of the apoptotic machinery. Mutations in this gene have been associated with the Proteus syndrome. Multiple alternatively spliced transcript variants have been found for this gene.

Immunogen

A synthetic peptide corresponding to internal region of human AKT1.

Source/Host

Sheep

Species Reactivity

Human

Conjugate

Unconjugated

Applications

WB, ELISA,

Format

Liquid

Size

100 µg

Buffer

In 20 mM KH₂PO₄, 150 mM NaCl, pH 7.2 (0.1% sodium azide)

Preservative

0.1% Sodium Azide

Storage

Store at 4°C. For long term storage store at -20°C. Aliquot to avoid repeated freezing and

thawing.

GENE INFORMATION

Gene Name	AKT1 v-akt murine thymoma viral oncogene homolog 1 [Homo sapiens (human)]
Official Symbol	AKT1
Synonyms	AKT1; v-akt murine thymoma viral oncogene homolog 1; AKT; PKB; RAC; CWS6; PRKBA; PKB-ALPHA; RAC-ALPHA; RAC-alpha serine/threonine-protein kinase; AKT1m; PKB alpha; RAC-PK-alpha; proto-oncogene c-Akt; protein kinase B alpha; rac protein kinase alpha;
Entrez Gene ID	207
Protein Refseq	NP_001014431
UniProt ID	B0LPE5
Chromosome Location	14q32.32
Pathway	AGE/RAGE pathway; AKT phosphorylates targets in the nucleus; AMPK signaling; AMPK signaling pathway
Function	14-3-3 protein binding; ATP binding; enzyme binding; identical protein binding