

Recombinant Human AKT1 cell lysate

Cat. No. AKT1-677HCL Lot. No. (See product label)

SPECIFICATION

Product Overview	Human AKT1 / PKB / PKB α derived in Baculovirus-Insect cells. The whole cell lysate is provided in 1X Sample Buffer. Browse all transfected cell lysate positive controls
Species	Human
Source	Insect Cells
Preparation method	Transfected cells were cultured for 48hrs before collection. The cells were lysed in modified RIPA buffer with cocktail of protease inhibitors. Cell debris was removed by centrifugation and then centrifuged to clarify the lysate. The cell lysate was boiled for 5 minutes in 1 x SDS sample buffer (50 mM Tris-HCl pH 6.8, 12.5% glycerol, 1% sodium dodecylsulfate, 0.01% bromophenol blue) containing 5% b-mercaptoethanol, and lyophilized.
Lysis buffer	Modified RIPA Lysis Buffer: 50 mM Tris-HCl pH 7.4, 150 mM NaCl, 1mM EDTA, 1% Triton X-100, 0.1% SDS, 1% Sodium deoxycholate, 1mM PMSF
Quality control Testing	12.5% SDS-PAGE Stained with Coomassie Blue
Recommended Usage	1. Centrifuge the tube for a few seconds and ensure the pellet at the bottom of the tube. 2. Re-dissolve the pellet using 200 μ L pure water and boiled for 2-5 min. 3. Store it at -80°C. Recommend to aliquot the cell lysate into smaller quantities for optimal storage. Avoid repeated freeze-thaw cycles. Notes: The lysate is ready to load on SDS-PAGE for Western blot application. If dissociating conditions are required, add

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reducing agent prior to heating.

Stability

Samples are stable for up to twelve months from date of receipt at -80°C

Storage Buffer

50 mM Tris-HCl pH 7.4, 150 mM NaCl, 1mM EDTA, 1% Triton X-100, 0.1% SDS, 1% Sodium deoxycholate, 1mM PMSF

Storage Instruction

Lysate samples are stable for 12 months from date of receipt when stored at -80°C. Avoid repeated freeze-thaw cycles. Prior to SDS-PAGE fractionation, boil the lysate for 5 minutes.

GENE INFORMATION

Gene Name

[AKT1 v-akt murine thymoma viral oncogene homolog 1 \[Homo sapiens \]](#)

Official Symbol

AKT1

Synonyms

AKT1; v-akt murine thymoma viral oncogene homolog 1; RAC-alpha serine/threonine-protein kinase; AKT; PKB; PRKBA; RAC; PKB alpha; RAC-PK-alpha; proto-oncogene c-Akt; protein kinase B alpha; rac protein kinase alpha; PKB-ALPHA; RAC-ALPHA; MGC99656;

Gene ID

[207](#)

mRNA Refseq

[NM_001014431](#)

Protein Refseq

[NP_001014431](#)

MIM

[164730](#)

UniProt ID

[P31749](#)

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**Chromosome
Location**

14q32.32-q32.33

Pathway

AKT phosphorylates targets in the cytosol, organism-specific biosystem; AKT phosphorylates targets in the nucleus, organism-specific biosystem; AKT-mediated inactivation of FOXO1A, organism-specific biosystem; Activation of BAD and translocation to mitochondria, organism-specific biosystem; Activation of BH3-only proteins, organism-specific biosystem; Acute myeloid leukemia, organism-specific biosystem; Acute myeloid leukemia, conserved biosystem;

Function

ATP binding; ATP binding; enzyme binding; identical protein binding; kinase activity; nitric-oxide synthase regulator activity; nucleotide binding; phosphatidylinositol-3,4,5-trisphosphate binding; phosphatidylinositol-3,4-bisphosphate binding; protein binding; protein kinase activity; protein serine/threonine kinase activity; protein serine/threonine kinase activity;

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