

Recombinant Human AKT2, His-tagged

Cat. No. AKT2-165H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant full-length human AKT2 was co-expressed with PDK1 by baculovirus infection in Sf9 insect cells.
Species	Human
Source	Insect Cells
Description	This gene is a putative oncogene encoding a protein belonging to a subfamily of serine/threonine kinases containing SH2-like (Src homology 2-like) domains. The gene was shown to be amplified and overexpressed in 2 of 8 ovarian carcinoma cell lines and 2 of 15 primary ovarian tumors. Overexpression contributes to the malignant phenotype of a subset of human ductal pancreatic cancers. The encoded protein is a general protein kinase capable of phosphorylating several known proteins.
Molecular Mass	57 kDa
Specific Activity	7 pmol/min/g. The enzyme reaction is conducted in a buffer containing 50 mM HEPES (pH7.5), 10 mM MgCl ₂ , 1 mM EGTA, 200 μ M ATP, 0.01% Brij-35, and 2 μ M substrate at 30 °C for 1 hour.
Application	Useful for the study of enzyme kinetics, screening inhibitors, and selectivity profiling.
Purity	≥90%
Formulated in	40 mM Tris-HCl, pH 8.0, 110 mM NaCl, 2.2 mM KCl, 250 mM imidazole, 20%

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glycerol, and 3 mM DTT.

Stability >6 months at –80°C

OfficialSymbol AKT2

GENE INFORMATION

Gene Name [AKT2 v-akt murine thymoma viral oncogene homolog 2 \[Homo sapiens \]](#)

Synonyms AKT2; v-akt murine thymoma viral oncogene homolog 2; PKBB; PRKBB; PKBBETA; RAC-BETA; AKT2 kinase; rac protein kinase beta; Murine thymoma viral (v-akt) homolog-2; EC 2.7.11.1; RAC-beta serine/threonine-protein kinase; RAC-PK-beta; Protein kinase Akt-2; Protein kinase B, beta; PKB beta

Gene ID [208](#)

mRNA Refseq [NM_001626](#)

Protein Refseq [NP_001617](#)

MIM [164731](#)

UniProt ID [P31751](#)

Chromosome Location 19q13.1-q13.2

Pathway Acute myeloid leukemia; Adipocytokine signaling pathway; Apoptosis; B cell receptor signaling pathway; Chemokine signaling pathway; Chronic myeloid leukemia; Colorectal cancer; Endometrial cancer; ErbB signaling pathway

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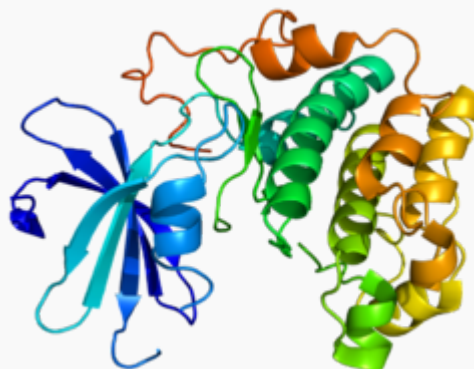
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Function

ATP binding; nucleotide binding; protein binding; protein serine/threonine kinase activity; transferase activity

**PDB rendering
based on 1gzk.**



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