

Product datasheet for AM00110PU-N

OriGene Technologies, Inc.

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AKT1 (C-term) (incl. pos. control) Mouse Monoclonal Antibody [Clone ID: 5C10]

Product data:

Product Type: Primary Antibodies

Clone Name: 5C10

Applications: ELISA, WB

Recommended Dilution: ELISA: Use at 0.05 μg/ml.

Western Blot: use at 0.5 μg/ml for HRPO/ECL detection.

Recommended blocking buffer: Casein/Tween 20 based blocking and blot incubation buffer.

Included Positive Control: HepG2 untreated (See Protocols).

Reactivity: Canine, Human, Mouse, Rat

Host: Mouse Isotype: IgG1

Clonality: Monoclonal

Immunogen: Synthetic peptide conjugated to KLH. Epitope: C-terminus (aa 466-480).

Specificity: This antibody specifically recognizes the C-terminus of protein kinase B (aa 466-480).

Formulation: 1 ml 2 x PBS containing 0.09% Sodium Azide, PEG and Sucrose

State: Purified

State: Lyophilized purified Ig fraction

Reconstitution Method: Restore with 1 ml H₂O (15 min, RT)

Purification: Subsequent Thiophilic Adsorption and Size Exclusion Chromatography

Conjugation: Unconjugated

Storage: Store lyophilized (preferably in a desiccator) at -20°C and reconstituted (aliquote and freeze

in liquid nitrogen) at -80°C.

Avoid repeated freezing and thawing.

Thaw aliquots at 37°C. Thawed aliquots may be stored at 4°C up to 3 months.

Stability: Shelf life: one year from despatch.

Predicted Protein Size: 60 kDa

Gene Name: AKT serine/threonine kinase 1

Database Link: <u>Entrez Gene 207 Human</u>

P31749





Note:

Background: The PKB (RAC/akt) protein kinases are a family of second messenger-regulated

serine/threonine kinases. Three mammalian isoforms (alpha, beta, gamma) have been identified so far; the alpha-isoform being the cellular homologue of the v-akt oncogene. Stimulation of cells with growth factors leads to activation of PKB by a phosphoinositide-3-

kinase dependent signal transduction pathway.

Synonyms: Akt-1, RAC-PK-alpha, Protein kinase B, C-AKT

Protocol: Positive Control Cell lysate provided

HepG2 unTreated

Formulation: Lyophilized cell lysate from serum starved HepG2 cells.

Reconstitution: Restore by addition of 200 μ l H₂O. After complete solubilization add 200 μ l 2x SDS-PAGE sample buffer, mix and incubate at 90°C for 5 min.

Storage: Store in aliquots at -20°C. Avoid repeated freezing and thawing.

Applications: The Positive Control Cell Lysate is recommended for Immunoblotting. 20 μ l of positive cell lysate correspond to ca. 80.000 cells.

Use 20 μ l/lane (mini gel) for HRPO/ECL detection of the target proteins.

<u>Note</u>: The lyophilized cell lysate contains SDS and **are not recommended** for applications with native proteins such as Immunoprecipitation.

Product images:

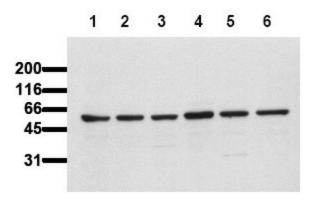


Figure 1. Detection of endogenous PKB Whole cell lysates of serum starved tumor cells (20.000 cells per lane) were applied to SDS-PAGE and transferred to a PVDF membrane. The immunoblot was probed with mab PKB-5C10 (0.5 ug/ ml) for 1h at RT and developed by ECL (exp. time: 3 min). lane 1: SW480; lane 2: SW620; lane 3: HT29; lane 4: MCF-7; lane 5: MDA-MB 231; lane 6: T47D