

Product datasheet for AM00108PU-N

OriGene Technologies, Inc.

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AKT1 (specific) (incl. pos. control) Mouse Monoclonal Antibody [Clone ID: 5G12]

Product data:

Product Type: Primary Antibodies

Clone Name: 5G12

Applications: ELISA, IHC, 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: Cell lysate from untreated Neuro2A cells.

The antiboby crossreacts in immunoblot applications with an unknown protein of ca. 120kDa

expressed in human tumor cell lines.

Immunohistochemistry.

Reactivity: Canine, Human, Rat

Host: Mouse Isotype: IgG1

Clonality: Monoclonal

Immunogen: Synthetic peptide conjugated to KLH.

Epitope: aa 107-122

Specificity: This antibody specifically recognizes the alpha isoform of PKB (PKBα/Akt1).

Formulation: PBS containing 0.09% Sodium Azide, PEG and Sucrose/50% Glycerol

State: Purified

State: Liquid purified Ig fraction

Concentration: lot specific

Purification: Subsequent Thiophilic Adsorption and Size Exclusion Chromatography

Conjugation: Unconjugated

Storage: Store the antibody (in aliquots) at -20°C.

Avoid repeated freezing and thawing.

Stability: Shelf life: one year from despatch.

Predicted Protein Size: 60 kDa



Database Link: Entrez Gene 207 Human

P31749

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

Note: Protocol: Positive Control Cell lysate provided

Neuro 2A untreated

Formulation: Lyophilized cell lysate from serum starved neuro 2A 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.

 $\textbf{Applications:} \ \text{The Positive Control Cell Lysate is recommended for Immunoblotting. 20 } \mu \text{I} \ \text{of}$

positive cell lysate correspond to ca. 20.000 cells.

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

Note: The lyophilized cell lysate contains SDS and are not recommended for applications

with native proteins such as Immunoprecipitation.