

Product Name: AKT1 Mouse Monoclonal Antibody
Catalog #: AMM81658



Summary

Production Name	AKT1 Mouse Monoclonal Antibody
Description	Mouse Monoclonal Antibody
Host	Mouse
Application	WB,ICC,FC,ELISA
Reactivity	Human,Mouse,Monkey,Rat

Performance

Conjugation	Unconjugated
Modification	Unmodified
Isotype	Mouse IgG1
Clonality	Monoclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Purified antibody in PBS with 0.05% sodium azide
Purification	Affinity Purification

Immunogen

Gene Name	AKT1
Alternative Names	AKT; PKB; RAC; CWS6; PRKBA; PKB-ALPHA; RAC-ALPHA
Gene ID	207.0
SwissProt ID	P31749.Purified recombinant fragment of human AKT1 (AA: 1-150) expressed in E. Coli.

Application

Dilution Ratio	WB:1:500-1:2000,ICC:1:200-1:1000,FC:1:200-1:400,ELISA:1:10000
Molecular Weight	55.7kDa

Background

The serine-threonine protein kinase encoded by the AKT1 gene is catalytically inactive in serum-starved primary and

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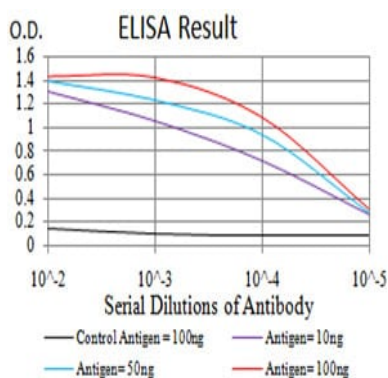


immortalized fibroblasts. AKT1 and the related AKT2 are activated by platelet-derived growth factor. The activation is rapid and specific, and it is abrogated by mutations in the pleckstrin homology domain of AKT1. It was shown that the activation occurs through phosphatidylinositol 3-kinase. In the 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.

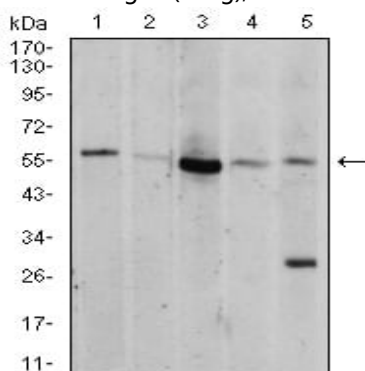
Research Area

Apoptosis, TGF-beta signaling pathway, PI3K-Akt signaling pathway, mTOR signaling pathway, MAPK signaling pathway, Jak-STAT signaling pathway

Image Data

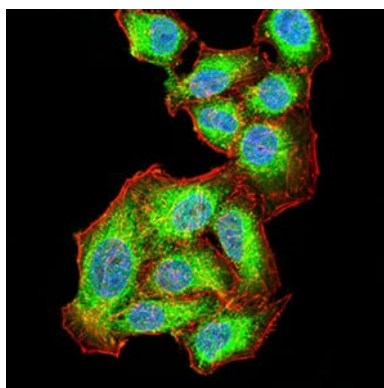


Black line: Control Antigen (100 ng); Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line: Antigen (100 ng)

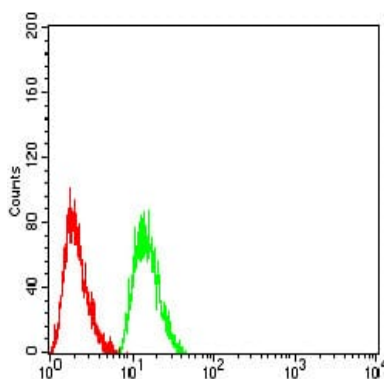


Western blot analysis using AKT1 mouse mAb against MCF-7 (1), NIH/3T3 (2), Hela (3), COS7 (4), and C6 (5) cell lysate.

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Immunofluorescence analysis of HepG2 cells using AKT1 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor- 555 phalloidin. Secondary antibody from Fisher (Cat#: 35503)



Flow cytometric analysis of Hela cells using AKT1 mouse mAb (green) and negative control (red).

Note

For research use only.