
AKT1 Polyclonal Antibody

(Catalog # A71180)

Background

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

Description

AKT1 Polyclonal Antibody. Unconjugated. Raised in: Rabbit.

Formulation

Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3.

Specificity

Human, Mouse, Rat

Isotype

IgG

Uniprot ID

P31749

Purification

Affinity Purified

Immunogen

A synthetic peptide corresponding to a sequence within amino acids 381-480 of human AKT1 (NP_005154.2)

Storage

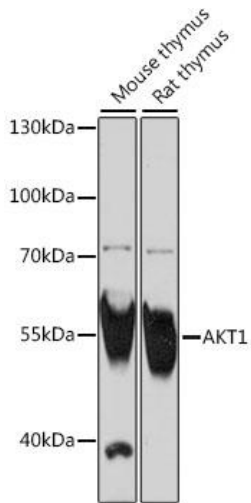
Shipped at 4°C. Upon receipt, store at -20°C. Avoid freeze / thaw cycles

Alternative Names

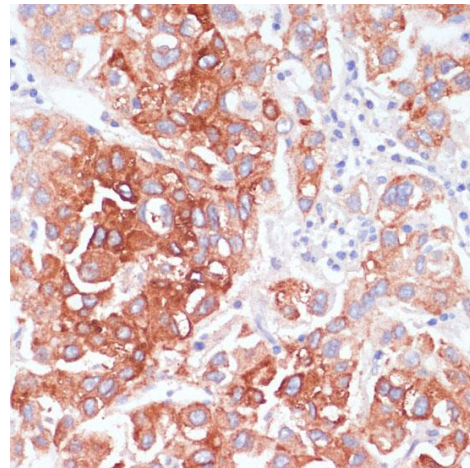
AKT1; AKT; CWS6; PKB; PKB-ALPHA; PRKBA; RAC; RAC-ALPHA; AKT serine/threonine kinase 1

Application

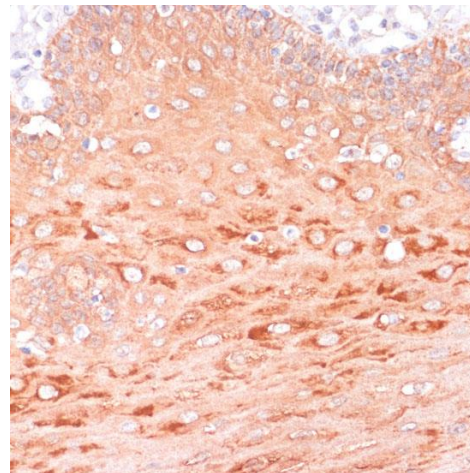
WB, IHC, IF; Recommended dilution, WB 1:500 - 1:2000, IHC 1:50 - 1:100, IF 1:50 - 1:200



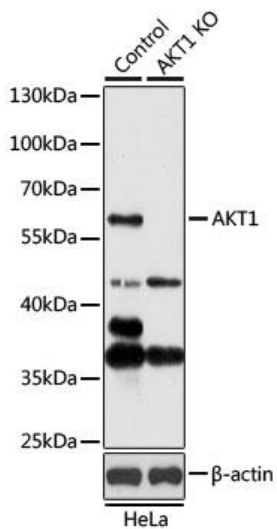
Western blot analysis of extracts of various cell lines, using AKT1 Polyclonal Antibody at 1:1000 dilution.
 Secondary Antibody: HRP Goat Anti-Rabbit IgG (H+L) at 1:10000 dilution.
 Lysates/proteins: 25ug per lane.
 Blocking buffer: 3% nonfat dry milk in TBST.
 Exposure time: 30s.



Immunohistochemistry of paraffin-embedded human liver cancer using AKT1 Polyclonal Antibody at dilution of 1:100 (40x lens).



Immunohistochemistry of paraffin-embedded human esophageal using AKT1 Polyclonal Antibody at dilution of 1:100 (40x lens).



Western blot analysis of extracts from normal (control) and AKT1 knockout (KO) HeLa cells, using AKT1 Polyclonal Antibody at 1:1000 dilution.
 Secondary Antibody: HRP Goat Anti-Rabbit IgG (H+L) at 1:10000 dilution.
 Lysates/proteins: 25ug per lane.
 Blocking buffer: 3% nonfat dry milk in TBST.
 Exposure time: 3min.