AKT1 Polyclonal Antibody

Catalog No.	A11016	**Category**	Polyclonal Antibodies
Applications	WB, IHC, IF	**Observed MW**	60kDa
Cross-reactivity	Human, Mouse, Rat	**Calculated MW**	48kDa/55kDa

Immunogen Information

Immunogen	A synthetic peptide corresponding to a sequence within amino acids 400 to the C-terminus of human AKT1 (NP_005154.2).
Gene ID	207
Swiss prot	P31749
Synonyms	AKT1; AKT; CWS6; PKB; PKB-ALPHA; PRKBA; RAC; R AC-ALPHA; AKT serine/threonine kinase 1

Product information

Source	Rabbit
Isotype	IgG
Purification method	Affinity purification
Storage	Store at -20℃. Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3.

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.

Recommended Dilutions

WB 1:500 - 1:2000

IHC 1:50 - 1:100

IF 1:50 - 1:100