

## Akt(Ab-308) Antibody

Catalog No: #21055

Package Size: #21055-1 50ul #21055-2 100ul #21055-4 25ul

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## Description

Product Name	Akt(Ab-308) Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Antibodies were produced by immunizing rabbits with synthetic peptide and KLH conjugates. Antibodies were purified by affinity-chromatography using epitope-specific peptide.
Applications	WB IHC
Species Reactivity	Hu Ms Rt
Specificity	The antibody detects endogenous level of total Akt protein.
Immunogen Type	Peptide-KLH
Immunogen Description	Peptide sequence around aa.306~310 (M-K-T-F-C) derived from Human AKT1.
Target Name	Akt
Other Names	RAC-PK-alpha; Protein kinase B;
Accession No.	Swiss-Prot: P31749NCBI Protein: NP_001014431.1
Concentration	1.0mg/ml
Formulation	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg <sup>2+</sup> and Ca <sup>2+</sup> ), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C for long term preservation (recommended). Store at 4°C for short term use.

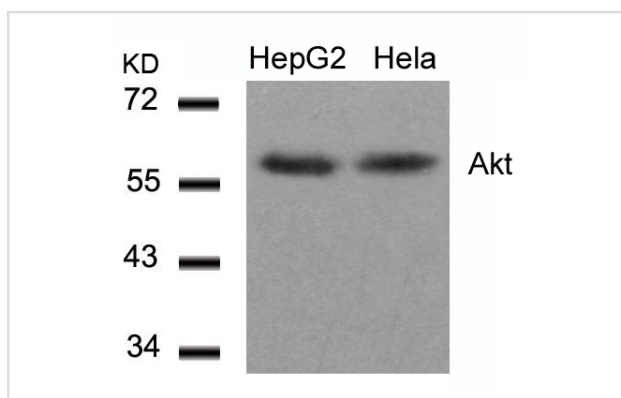
## Application Details

Predicted MW: 60kd

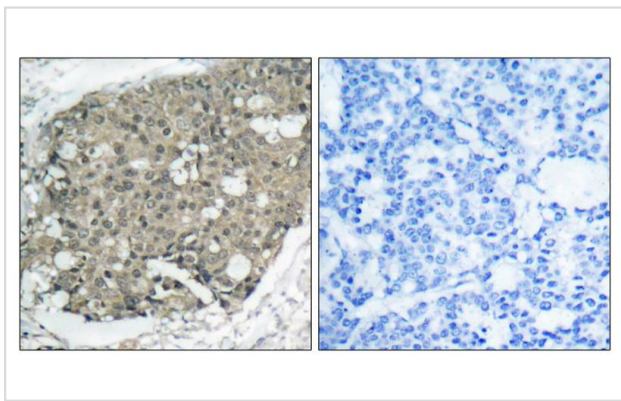
Western blotting: 1:500~1:1000

Immunohistochemistry: 1:50~1:100

## Images



Western blot analysis of extracts from HepG2 and HeLa cells using Akt(Ab-308) Antibody #21055.



Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using Akt(Ab-308) Antibody #21055(left) or the same antibody preincubated with blocking peptide(right).

## Background

General protein kinase capable of phosphorylating several known proteins. Phosphorylates TBC1D4. Signals downstream of phosphatidylinositol 3-kinase (PI3K) to mediate the effects of various growth factors such as platelet-derived growth factor (PDGF), epidermal growth factor (EGF), insulin and insulin-like growth factor I (IGF-I). Plays a role in glucose transport by mediating insulin-induced translocation of the GLUT4 glucose transporter to the cell surface. Mediates the antiapoptotic effects of IGF-I. Mediates insulin-stimulated protein synthesis by phosphorylating TSC2 at 'Ser-939' and 'Thr-1462', thereby activating mTORC1 signaling and leading to both phosphorylation of 4E-BP1 and in activation of RPS6KB1. Promotes glycogen synthesis by mediating the insulin-induced activation of glycogen synthase.

Tremblay F, et al. (2005) *Diabetes*; 54(9): 2674-84.

Xu BE, et al. (2005) *J Biol Chem*; 280(40): 34218-23.

Samuels Y, et al. (2005) *Cancer Cell*; 7(6): 561-73.

Di Maira G, et al. (2005) *Cell Death Differ*; 12(6): 668-77.

## Published Papers

Nabissi Massimo, Morelli Maria Beatrice, Amantini Consuelo et al., TRPV2 channel negatively controls glioma cell proliferation and resistance to Fas-induced apoptosis in ERK-dependent manner., *Carcinogenesis*, 31(5):794-803(2010)

[PMID:20093382](#)

Note: This product is for in vitro research use only and is not intended for use in humans or animals.