

AKT1/AKT2/AKT3(Ab-315/316/312) Antibody

Catalog No: #21501

Package Size: #21501-1 50ul #21501-2 100ul

Description

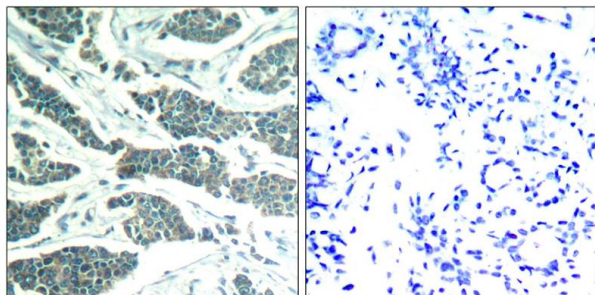
Product Name	AKT1/AKT2/AKT3(Ab-315/316/312) Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Antibodies were produced by immunizing rabbits with synthetic peptide and KLH conjugates. Antibodies were purified by affinity-chromatography using epitope-specific peptide.
Applications	IHC
Species Reactivity	Hu Ms Rt
Specificity	The antibody detects endogenous level of total AKT1/AKT2/AKT3 protein.
Immunogen Type	Peptide-KLH
Immunogen Description	Peptide sequence around aa.313~317/314~318/310~314 (P-E-Y-L-A) derived from Human AKT1/AKT2/AKT3.
Conjugates	Unconjugated
Target Name	AKT1/AKT2/AKT3
Other Names	RAC-PK-alpha; Protein kinase B;
Accession No.	Swiss-Prot: P31749 P31751 Q9Y243NCBI Protein: NP_001014431.1 NP_001617.1 NP_005456.1
Concentration	1.0mg/ml
Formulation	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg ²⁺ and Ca ²⁺), 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

Immunohistochemistry: 1:50~1:100

Images



Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using AKT1/AKT2/AKT3(Ab-315/316/312) Antibody #21501(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. /General protein kinase capable of phosphorylating several known proteins. /IGF-1 leads to the activation of AKT3, which may play a role in regulating cell survival. Capable of phosphorylating several known proteins. Truncated isoform 2/PKB gamma 1 without the second serine phosphorylation site could still be stimulated but to a lesser extent.

Nelms K, et al. (1999) Annu Rev Immunol. 17:701-738.

Malabarba M G, et al. (1996) Biochem. J. 319:865-872.

Hou J, et al. (1994) Science. 265:1701-1706.

Quelle F W, et al. (1995) Mol Cell Biol. 15: 3336-3343.

Takeda K, et al. (1996) Nature. 380: 627-630.

Published Papers

el at., Exosomes derived from human mesenchymal stem cells promote gastric cancer cell growth and migration via the activation of the Akt pathway. In Mol Med Rep. On 2016 Oct by Gu H, Ji R et al.. PMID:27513187, , (2016)

[PMID:27513187](#)

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