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

Catalog No: #21501

Package Size: #21501-1 50ul #21501-2 100ul #21501-4 25ul

Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

Description

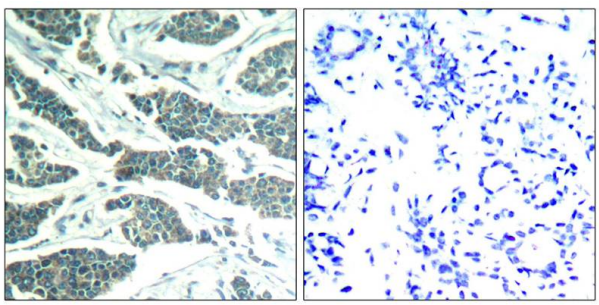
Product Name	AKT1/AKT2/AKT3(Ab-315/316/312) Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Antibodies were produced by immunizing rabbits with synthetic peptide and KLH conjugates. Antibodies were purified by affinity-chromatography using epitope-specific peptide.
Applications	IHC
Species 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.
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 Mg2+ and Ca2+), 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.