AKT1/AKT2/AKT3(phospho-Tyr315/316/312) Antibody

Catalog No: #11501





Overview

Product Name	AKT1/AKT2/AKT3(phospho-Tyr315/316/312) Antibody
Host Species	Rabbit
Clonality	Polyclonal
Applications	WB IHC IF
Species Reactivity	Hu Ms Rt
Immunogen Type	Peptide-KLH
Target Name	AKT1/AKT2/AKT3
Modification	Phospho-Tyr315/316/312
Alternative Names	RAC-PK-alpha; Protein kinase B;

Application Details

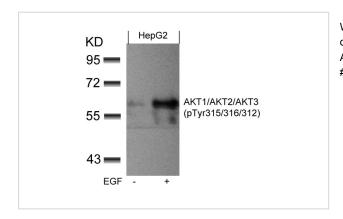
Predicted MW: 60kd

Western blotting: 1:500~1:1000

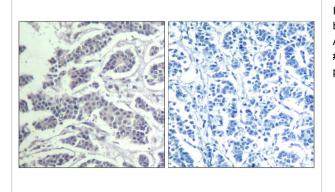
Immunohistochemistry: 1:50~1:100

Immunofluorescence: 1:100~1:200

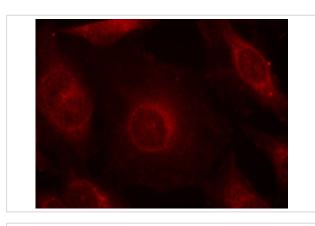
Images



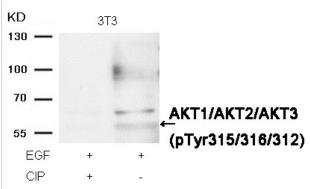
Western blot analysis of extracts from HepG2 cells untreated or treated with EGF using AKT1/AKT2/AKT3(phospho-Tyr315/316/312) Antibody #11501.



Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using AKT1/AKT2/AKT3(Phospho-Tyr315/316/312) Antibody #11501(left) or the same antibody preincubated with blocking peptide(right).



Immunofluorescence staining of methanol-fixed Hela cells using AKT1/AKT2/AKT3(phospho-Tyr315/316/312) Antibody #11501.



Western blot analysis of extracts from 3T3 cells, treated with EGF or calf intestinal phosphatase (CIP), using AKT1/AKT2/AKT3 (phospho-Tyr315/316/312) Antibody #11501.

Descriptions

Immunogen	Peptide sequence around phosphorylation site of tyrosine 315/316/312 (P-E-Y(p)-L-A) derived from Human
	AKT1/AKT2/AKT3.
Specificity	The antibody detects endogenous level of AKT1/AKT2/AKT3 only when phosphorylated at tyrosine
	315/316/312.
Purifiction	Antibodies were produced by immunizing rabbits with synthetic phosphopeptide and KLH conjugates.
	Antibodies were purified by affinity-chromatography using epitope-specific phosphopeptide. Non-phospho
	specific antibodies were removed by chromatogramphy using non-phosphopeptide.
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.
Accession NO.	Swiss-Prot: P31749 P31751 Q9Y243NCBI Protein: NP_001014431.1 NP_001617.1 NP_005456.1

Related Information

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.

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