

9853 Pacific Heights Blvd. Suite D. San Diego, CA 92121, USA Tel: 858-263-4982

Email: info@abeomics.com

## 35-1301: Polyclonal Antibody to AKT1/AKT2/AKT3 (phospho-Tyr315/316/312)

Clonality: Polyclonal Application: WB,IHC,IF

**Reactivity:** Human, Mouse, Rat

**Gene :** AKT1 **Gene ID :** 207

**Uniprot ID:** P31749 /P31751 Q

Format: Purified

**Alternative Name:** RAC-PK-alpha, Protein kinase B

**Isotype:** Rabbit IgG

Immunogen Information: Peptide sequence around phosphorylation site of tyrosine 315/316/312 (P-E-Y(p)-L-A) derived

from Human AKT1/AKT2/AKT3.

## **Description**

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.

## **Product Info**

**Amount:** 50 μl / 100 μl

Content: 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 condition :** Store the antibody at 4°C, stable for 6 months. For long-term storage, store at -20°C. Avoid

repeated freeze and thaw cycles.

## **Application Note**

Predicted MW: 60kd, Western blotting:  $1:500\sim1:1000$ , Immunohistochemistry:  $1:50\sim1:100$ , Immunofluorescence:  $1:100\sim1:200$ 

1:100~1:200



9853 Pacific Heights Blvd. Suite D. San Diego, CA 92121, USA Tel: 858-263-4982

Email: info@abeomics.com

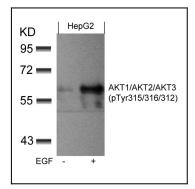


Figure 1: Western blot analysis of extracts from HepG2 cells untreated or treated with EGF using AKT1/AKT2/AKT3(phospho-Tyr315/316/312) Antibody 35-1301.

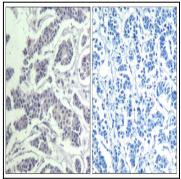


Figure 2: Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using AKT1/AKT2/AKT3(Phospho-Tyr315/316/312) Antibody 35-1301 (left) or the same antibody preincubated with blocking peptide(right).

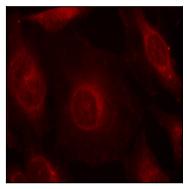


Figure 3: Immunofluorescence staining of methanol-fixed Hela cells using AKT1/AKT2/AKT3(phospho-Tyr315/316/312) Antibody 35-1301 .

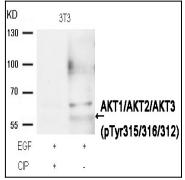


Figure 4: Western blot analysis of extracts from 3T3 cells, treated with EGF or calf intestinal phosphatase (CIP), using AKT1/AKT2/AKT3 (phospho-Tyr315/316/312) Antibody 35-1301.