

35-1409: Polyclonal Antibody to Akt (Ab-308)

Clonality :	Polyclonal
Application :	IHC,WB
Reactivity :	Rat,Mouse,Human
Gene :	AKT1
Gene ID :	207
Uniprot ID :	P31749
Format :	Purified
Alternative Name :	RAC-PK-alpha, Protein kinase B
Isotype :	Rabbit IgG
Immunogen Information :	Peptide sequence around aa.306~310 (M-K-T-F-C) derived from Human AKT1.

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. 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.

Product Info

Amount :	50 µl / 100 µl
Content :	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 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: 1:500~1:1000, Immunohistochemistry: 1:50~1:100

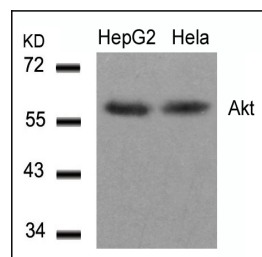


Figure 1: Western blot analysis of extracts from HepG2 and HeLa cells using Akt(Ab-308) Antibody 35-1409 .

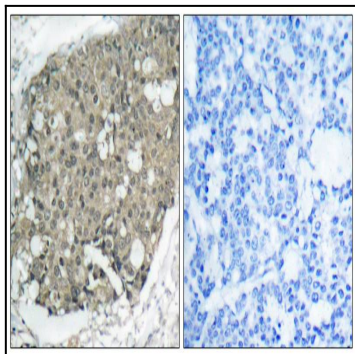


Figure 2: Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using Akt(Ab-308) Antibody 35-1409 (left) or the same antibody preincubated with blocking peptide(right).