Akt(Ab-308) Antibody

Catalog No: #21055

Package Size: #21055-1 50ul #21055-2 100ul



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

| Description           |   |  |  |
|-----------------------|---|--|--|
| Product Name          | Akt(Ab-308) 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          | WB IHC  |  |  |
| Species Reactivity    | Hu Ms Rt  |  |  |
| Specificity           | The antibody detects endogenous level of total Akt protein.   |  |  |
| Immunogen Type        | Peptide-KLH   |  |  |
| Immunogen Description | Peptide sequence around aa.306~310 (M-K-T-F-C) derived from Human AKT1.                                   |  |  |
| Target Name           | Akt   |  |  |
| Other Names           | RAC-PK-alpha; Protein kinase B;   |  |  |
| Accession No.         | Swiss-Prot: P31749NCBI Protein: NP_001014431.1  |  |  |
| Uniprot               | P31749  |  |  |
| GeneID                | 207;  |  |  |
| 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             |    |  |  |
|--------------------------------|----|--|--|
| Western blotting: 1:500~1:1000 |    |  |  |
| Immunohistochemistry: 1:50~1:1 | 00 |  |  |

## Images

| KD<br>72 🕳 | HepG2 Hela |     |
|------------|------------|-----|
| 55 🕳       |            | Akt |
| 43 💻       |            |     |
| 34 🕳       | and the    |     |

Western blot analysis of extracts from HepG2 and Hela cells using Akt(Ab-308) Antibody #21055.



Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using Akt(Ab-308) Antibody #21055(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.

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.

Note: This product is for in vitro research use only