## Product Datasheet

## Akt(Phospho-Thr308) Antibody

Catalog No: \#11055

Package Size: \#11055-1 50ul \#11055-2 100ul \#11055-4 25ul

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

## Description

| Product Name | Akt(Phospho-Thr308) Antibody |
| :---: | :---: |
| Host Species | Rabbit |
| Clonality | Polyclonal |
| Purification | 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. |
| Applications | WB IHC IF |
| Species Reactivity | Hu Ms Rt |
| Specificity | The antibody detects endogenous level of Akt only when phosphorylated at threonine 308. |
| Immunogen Type | Peptide-KLH |
| Immunogen Description | Peptide sequence around phosphorylation site of threonine 308 (M-K-T(p)-F-C) derived from Human Akt. |
| Target Name | Akt |
| Modification | Phospho-Thr308 |
| Other Names | C-AKT; PKB; PKB-alpha; RAC; RAC-PK-alpha |
| Accession No. | Swiss-Prot: P31749NCBI Protein: NP_001014431.1 |
| Concentration | $1.0 \mathrm{mg} / \mathrm{ml}$ |
| Formulation | Supplied at $1.0 \mathrm{mg} / \mathrm{mL}$ in phosphate buffered saline (without $\mathrm{Mg} 2+$ and $\mathrm{Ca} 2+$ ), $\mathrm{pH} 7.4,150 \mathrm{mM} \mathrm{NaCl}, 0.02 \%$ sodium azide and $50 \%$ glycerol. |
| Storage | Store at $-20^{\circ} \mathrm{C}$ for long term preservation (recommended). Store at $4^{\circ} \mathrm{C}$ for short term use. |

## 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 Hela cells untreated or treated with EGF, serum or both using Akt(Phospho-Thr308) Antibody \#11055.


Immunohistochemical analysis of paraffin-embedded human lung carcinoma tissue, using Akt (Phospho-Thr308) Antibody \#11055.

Immunofluorescence staining of methanol-fixed Hela cells showing nuclear dot staining using Akt (Phospho-Thr308) Antibody \#11055.

## 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.

Published Papers

Alexandra V. Andreeva, Jingyan Han el at., T-cadherin modulates endothelial barrier function, Journal of cellular Physiology, 223(1) 1, 94-102(2010) PMID:20039275

Nan Li, Heng Lu, Chunyan Chen el at., Loss of fatty acid synthase inhibits the B'HER2-PI3K/Akt axisB‘ $\pm$ activity and malignant phenotype of Caco-2 cells Lipids in Health and Disease., Lipids in Health and Disease., 12:83(2013)

PMID:23725225

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

