Product Datasheet

Akt(Phospho-Thr308) Antibody

Catalog No: #11055

Package Size: #11055-1 50ul #11055-2 100ul



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

Description

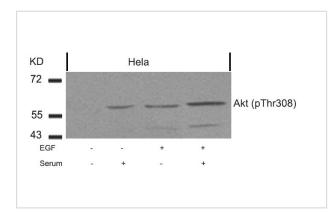
Product Name	Akt(Phospho-Thr308) Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Antibodies were produced by immunizing rabbits with synthetic phosphopeptide and KLH conjugates.
	Antibodies were purified by affinity-chromatography using epitope-specific phosphopeptide. Non-phospho
	specific antibodies were removed by chromatogramphy using non-phosphopeptide.
Applications	WB IHC IF
Species Reactivity	Human;Mouse;Rat
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.
Conjugates	Unconjugated
Target Name	Akt
Modification	Phospho
Other Names	C-AKT; PKB; PKB-alpha; RAC; RAC-PK-alpha
Accession No.	Swiss-Prot: P31749NCBI Protein: NP_001014431.1
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

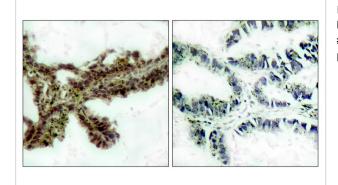
Predicted MW: 60kd
Western blotting: 1:500~1:1000
Immunohistochemistry: 1:50~1:100

Immunofluorescence: 1:100~1:200

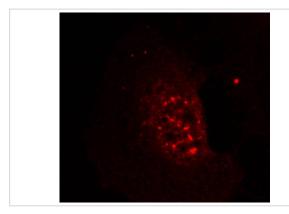
Images



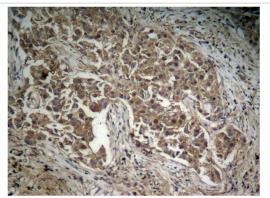
Western blot analysis of extracts from Hela cells untreated or treated with EGF, serum or both using Akt(Phospho-Thr308) Antibody #11055.



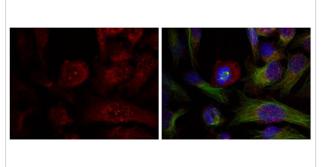
Immunohistochemical analysis of paraffin-embedded human lung carcinoma tissue, using Akt (Phospho-Thr308) Antibody #11055 (left) or the same antibody preincubated with blocking peptide #51055 (right).



Immunofluorescence staining of methanol-fixed Hela cells showing nuclear dot staining 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 ι ζ ³HER2-PI3K/Akt axisι ε• activity and malignant phenotype of Caco-2 cells Lipids in Health and Disease., Lipids in Health and Disease., 0.557638889(2013)

PMID:23725225

el at., A role for Wnt/β-catenIn signallIng In suppressIng Bacillus Calmette-GuerIn-Induced macrophage autophagy. In Microb Pathog on 2019 Feb; by Wu X, Zhang J, et al..PMID:30550847, , (2019)

PMID:30550847

el at., Pregnane X receptor activation constraIns mucosal NF-κB activity In active Inflammatory bowel disease. In PLoS One on 2019 Oct 3,by DeurIng JJ, Li M,et al..PMID:31581194, , (2019)

PMID:31581194

el at., Downregulation of FHL1 protein in glioma inhibits tumor growth through PI3K/AKT signaling. In Oncol Lett on 2020 Jun; by Li SZ, Hu YY, et al.. PMID: 32382330, , (2020)

PMID:32382330

el at., Fatty Acid Synthase Regulates Proliferation and Migration of Colorectal Cancer Cells via HER2-Pl3K/Akt Signaling Pathway.In Nutr Cancer on 2012 Aug by Nan Li, Xiaodong Bu,et al..PMID:22860766, , (2012)

PMID:22860766

el at., T-cadherin Modulates Endothelial Barrier Function.In J Cell Physiol on 2010 Apr by Jingyan Han, Mikhail A Kutuzov,et al..PMID:20039275, , (2010)

PMID:20039275

el at., Glutamate Acting on N-Methyl-D-aspartate Receptors Attenuates Insulin-like Growth Factor-1 Receptor Tyrosine Phosphorylation and Its Survival Signaling Properties in Rat Hippocampal Neurons. In J Biol Chem 2009 Jan 9 by Wen-Hua Zheng, Rθ mi Quirionι ε t al..PMID: 18981172, , (2009)

PMID:18981172

el at., Glutamate acting on NMDA receptors attenuates IGF-1 receptor tyrosine phosphorylation and its survival signaling properties in rat hippocampal neurons. In J Biol Chem

on 2009 Jan 9 by Wen-Hua Zheng, R0 mi Quirioni ?et al..PMID:18981172, , (2009)

PMID:18981172

el at., Tı ζ • adherin modulates endothelial barrier function. In J Cell Physiol on 2010 Apr by Jingyan Han, Mikhail A Kutuzov, et al..PMID: 20039275, , (2010)

PMID:20039275

el at., Cadmium-induced ER Stress and Inflammation Are Mediated Through C/EBP-DDIT3 Signaling in Human Bronchial Epithelial Cells.In Exp Mol Med on 2017 Sep by Jeeyoung Kim, Haengseok Song, et al..PMID: 28860664, , (2017)

PMID:28860664

el at., Choline Prevents Fetal Overgrowth and Normalizes Placental Fatty Acid and Glucose Metabolism in a Mouse Model of Maternal Obesity.In J Nutr Biochem on 2017 Nov by Juha Nam, Esther Greenwald, et al..PMID: 28915389, , (2017)

PMID:28915389

el at., H2O2 treatment or serum deprivation induces autophagy and apoptosis in naked mole-rat skin fibroblasts by inhibiting the PI3K/Akt signaling pathway.In Oncotarget on 2016 Dec 20 by Shanmin Zhao, Li Li et al..PMID:27863375, , (2016)

PMID:27863375

el at., The combined anticancer of peanut skin procyanidins and resveratrol to CACOβ • 2 colorectal cancer cellsInFood Sci NutrOn2023 Aug 3byNa Wang,Enguang Gao et al..PMID: 37831732, , (2023)

PMID:37831732

Renjie Cui;Nan Jiang;Meiqin Zhang;Sichen Du;Huayuan Ou;Runsheng Ge;Duan Ma;Jin Zhang el at., AMOTL2 inhibits JUN Thr239 dephosphorylation by binding PPP2R2A to suppress the proliferation in non-small cell lung cancer cells, , (2021)

PMID:32950569

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