

Akt(Phospho-Ser473) Antibody

Catalog No: #11054



Package Size: #11054-1 50ul #11054-2 100ul

Orders: order@signalwayantibody.com

Support: tech@signalwayantibody.com

Description

Product Name	Akt(Phospho-Ser473) 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 chromatography using non-phosphopeptide.
Applications	WB IHC IF
Species Reactivity	Hu Ms Rt
Specificity	The antibody detects endogenous level of Akt only when phosphorylated at serine 473.
Immunogen Type	Peptide-KLH
Immunogen Description	Peptide sequence around phosphorylation site of serine 473 (Q-F-S(p)-Y-S) derived from Human Akt.
Target Name	Akt
Modification	Phospho
Other Names	C-AKT; PKB; PKB-alpha; RAC; RAC-PK-alpha; akt s473; akt 473; akt ser473 antibody
Accession No.	Swiss-Prot: P31749NCBI Protein: NP_001014431.1
Concentration	1.0mg/ml
Formulation	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	Store at -20°C for long term preservation (recommended). Store at 4°C for short term use.

Application Details

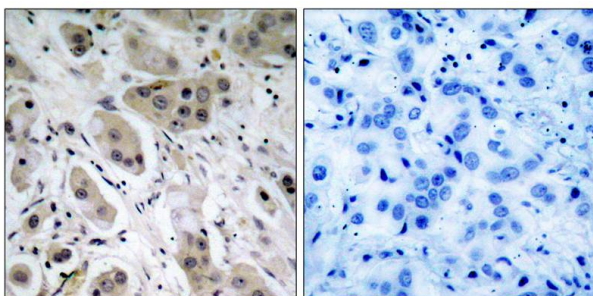
Predicted MW: 60kd

Western blotting: 1:500~1:1000

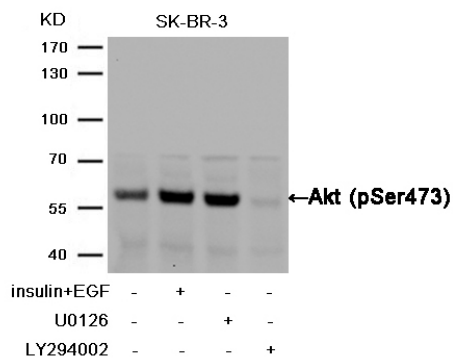
Immunohistochemistry: 1:50~1:100

IF dilution: 1:100-1:200

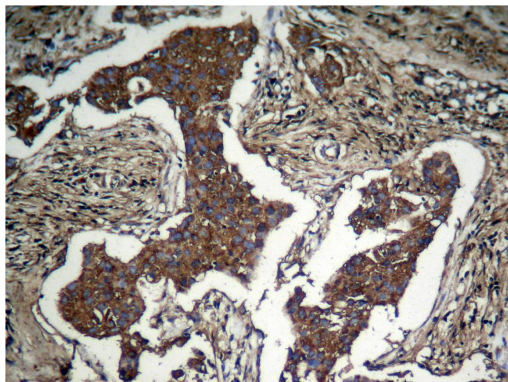
Images



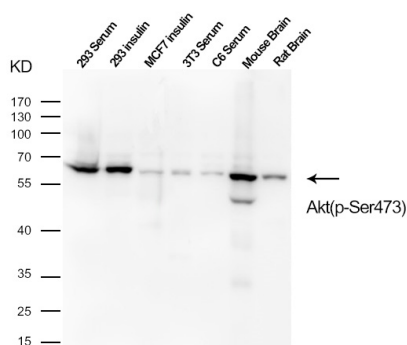
Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using Akt(Phospho-Ser473) Antibody #11054(left) or the same antibody preincubated with blocking peptide(right).



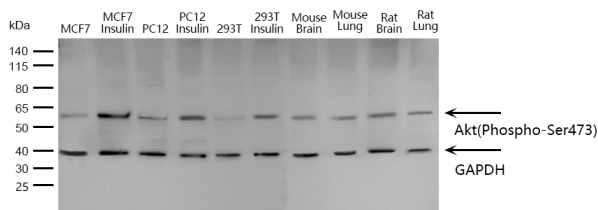
Western blot analysis of extracts from SK-BR-3 cells, treated with insulin and EGF, and pretreated with U0126 and LY294002 cells using Akt (Phospho-Ser473) Antibody #11054.



Immunohistochemical analysis of paraffin-embedded human Lung carcinoma tissue using Akt (Phospho-Ser473) Antibody #11054.



Western blot analysis of extracts of various cell lines, using Akt(Phospho-Ser473) #11054



Western blot analysis of various lysates using Akt(Phospho-Ser473) Antibody at 1:500 dilution. Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (L3012) at 1:10000 dilution. Lysates/proteins: 25 µg per lane.

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.

Baudhuin LM, et al. (2004) FASEB J Feb; 18(2): 341-3.

Min YH, et al. (2004) *Cancer Res*; 64(15): 5225-31.
Feng J, et al. (2004) *J Biol Chem*; 279(34): 35510-7.

Published Papers

el at., The combined anticancer of peanut skin procyanidins and resveratrol to CACO β • 2 colorectal cancer cells *In Food Sci Nutr* On 2023 Aug 3 by Na Wang, Enguang Gao et al.. PMID: 37831732, , (2023)

[PMID:37831732](#)

el at., Alleviative effects of α -lipoic acid on muscle atrophy via the modulation of TNF- α /JNK and PI3K/AKT pathways in high-fat diet and streptozotocin-induced type 2 diabetic rats *In Food Sci Nutr* On 2023 Jan 12 by Chih-Yuan Ko 1 2 3, Chi-Hao Wu et al.. PMID: 37051351, , (2023)

[PMID:37051351](#)

el at., Eurycomanone stimulates bone mineralization in zebrafish larvae and promotes osteogenic differentiation of mesenchymal stem cells by upregulating AKT/GSK-3 β / β -catenin signaling *In J Orthop Translat* On 2023 Jun 15 by Yan-Ting Zhon , Hong-Bo Liao et al.. PMID:37457309, , (2023)

[PMID:37457309](#)

el at., A multi-omics approach based on 1H-NMR metabolomics combined with target protein analysis to reveal the mechanism of RIAISs on cervical carcinoma *In Aging (Albany NY)* On 2022 Sep 27 by Chai Yanlan , Aibibai Jielili et al.. PMID:36170024, , (2023)

[PMID:36170024](#)

el at., Effect of Fushengong Decoction on PTEN/PI3K/AKT/NF-KB Pathway in Rats With Chronic Renal Failure via Dual-Dimension Network Pharmacology Strategy. *In Front Pharmacol* on 2022 Mar 15 by Hongyu Luo, Munan Wang, et al.. PMID: 35370667, , (2022)

[PMID:35370667](#)

el at., Protective effect of poly (ADP-ribose) polymerase inhibition on light-induced ciliary degeneration in photoreceptors, , (2022)

[PMID:](#)

el at., CD155 Cooperates with PD-1/PD-L1 to Promote Proliferation of Esophageal Squamous Cancer Cells via PI3K/Akt and MAPK Signaling Pathways. *In Cancers (Basel)* on 2022 Nov 15 by Xiyang Tan, Jie Yang, et al.. PMID:36428703, , (2022)

[PMID:36428703](#)

el at., White spot syndrome virus directly activates mTORC1 signaling to facilitate its replication via polymeric immunoglobulin receptor-mediated infection in shrimp. *In PLoS Pathog* on 2022 Sep 6 by Pan-Pan Hong, Cang Li, et al.. PMID: 36067252, , (2022)

[PMID:36067252](#)

el at., Effect of Fushengong Decoction on PTEN/PI3K/AKT/NF-kB Pathway in Rats With Chronic Renal Failure via Dual-Dimension Network Pharmacology Strategy. *In Front Pharmacol* on 2022 Mar 15 by Hongyu Luo, Munan Wang, et al.. PMID: 35370667, , (2022)

[PMID:35370667](#)

el at., The Flavagline Compound 1-(2-(dimethylamino)acetyl)-Rocaglaol Induces Apoptosis in K562 Cells by Regulating the PI3K/ Akt/mTOR, JAK2/STAT3, and MAPK Pathways. *In Drug Des Devel Ther* on 2022 Aug 4 by Xinmei Yang, Xijun Wu, et al.. PMID:35959422, , (2022)

[PMID:35959422](#)

el at., In Vitro and In Vivo Evaluation of Antidiabetic Properties and Mechanisms of Ficus tikoua Bur.. *In Nutrients* on 2022 Oct 20 by Hanlei Wang, Kun Zhang, et al.. PMID:36297098, , (2022)

[PMID:36297098](#)

el at., Brevilin A Ameliorates Acute Lung Injury and Inflammation Through Inhibition of NF-kB Signaling via Targeting IKK α / β . *In Front Pharmacol* on 2022 Jun 14 by Lu Liu, Xian Chen, et al.. PMID:35774606, , (2022)

[PMID:35774606](#)

el at., Alpha-lipoic acid alleviates NAFLD and triglyceride accumulation in liver via modulating hepatic NLRP3 inflammasome activation pathway in type 2 diabetic rats. *In Food Sci Nutr* on 2021 Mar 13 by Chih-Yuan Ko, Yangming Martin Lo, et al.. PMID: 34026086, , (2021)

[PMID:34026086](#)

el at., Grape seed proanthocyanidin extract ameliorates cisplatin-induced testicular apoptosis via PI3K/Akt/mTOR and endoplasmic reticulum stress pathways in rats. In *J Food Biochem* on 2021 Jun 21 by Xuhong Chang, Minmin Tian, et al..PMID:34152018, , (2021)

[PMID:34152018](#)

el at., Exenatide improves random-pattern skin flap survival via TFE3 mediated autophagy augment. In *J Cell Physiol* on 2021 May by Jiafeng Li, Huanwen Chen, et al..PMID:33044023, , (2021)

[PMID:33044023](#)

el at., NCS-1 associates with adenosine A2A receptors and modulates receptor function. In *Front Mol Neurosci* on 2012 Apr 18 by Gemma Navarro, Johannes Hradsky,

et al..PMID:22529776, , (2021)

[PMID:22529776](#)

el at., Methamphetamine Blocks Adenosine A2A Receptor Activation via Sigma 1 and Cannabinoid CB1 Receptors. In *Int J Mol Sci* on 2021 Mar 9 by Mireia Casanovas, Irene

Reyes-Resina, et al..PMID:33803075, , (2021)

[PMID:33803075](#)

el at., Phytoestrogens protect joints in collagen induced arthritis by increasing IgG glycosylation and reducing osteoclast activation. In *Int Immunopharmacol* on 2020 Mar 12 by Du N, Song L, et al..PMID:32172207, , (2020)

[PMID:32172207](#)

el at., Costunolide improved dextran sulfate sodium-induced acute ulcerative colitis in mice through NF- κ B, STAT1/3, and Akt signaling pathways. In *Int Immunopharmacol* on 2020 Jul by Fan Xie, Hai Zhang, et al..PMID:32413737, , (2020)

[PMID:32413737](#)

el at., Downregulation of GLYAT facilitates tumor growth and metastasis and poor clinical outcomes through the PI3K/AKT/Snail pathway in human breast cancer., , (2020)

[PMID:](#)

el at., Study on the Therapeutic Effects of Traditional Chinese Medicine on Insulin Resistance in Obese Mice by Modulating Intestinal Function., , (2020)

[PMID:](#)

el at., Screening active components from *Rubus amabilis* for pancreatic β -cells protection. In *Pharm Biol* on 2020 Dec by Min Sun, Tiantian Zhu, et al..PMID: 32659127, , (2020)

[PMID:32659127](#)

el at., Glutathione S-transferases P1 protects breast cancer cell from adriamycin-Induced cell death through promoting autophagy. In *Cell Death Differ* on 2019 Jan 25 by Dong X, Yang Y, et al.. PMID: 30683915, , (2019)

[PMID:30683915](#)

el at., RhoA from *Rheum rhabarbarum* inhibits Hydrogen-Peroxide-Induced Oxidative Stress in intestinal Epithelial Cells Partly through PI3K/Akt-Mediated Nrf2/HO-1 Pathways. In *J Agric Food Chem* on 2019 Mar 6, by Zhuang S, Yu R, et al..PMID: 30779558, , (2019)

[PMID:30779558](#)

el at., Biased G Protein-Independent Signaling of Dopamine D1-D3 Receptor Heteromers In the Nucleus Accumbens. In *Mol Neurobiol* on 2019 Mar 27 by Guitart X, Moreno E et al.. PMID:30919214, , (2019)

[PMID:30919214](#)

el at., The synergic inhibitory effects of dark tea (*Camellia sinensis*) extract and p38 inhibition on the growth of pancreatic cancer cells. In *J Cancer* on 2019 Oct 21 by Zheng K, Zhao Q, et al..PMID:31777585, , (2019)

[PMID:31777585](#)

el at., Optimized postconditioning algorithm protects liver graft after liver transplantation in rats. In *Hepatobiliary Pancreat Dis Int*. On 2018 Feb by Li JH, Jia JJ et al..PMID: 29428101, , (2018)

[PMID:29428101](#)

el at., Inhibition of miRNA?21 attenuates the proliferation and metastasis of human osteosarcoma by upregulating PTEN.In *Exp Ther Med*.On 2018 Jan by Li C, Xu B et al..PMID:29434694, , (2018)

[PMID:29434694](#)

el at., Essential Role of Polo-like Kinase 1 (Plk1) Oncogene in Tumor Growth and Metastasis of Tamoxifen-Resistant Breast Cancer.In *Mol Cancer Ther.* On 2018 Apr by Jeong SB, Im JH et al..PMID:29437878, , (2018)

[PMID:29437878](#)

el at., Epithelial Cells Attenuate Toll-Like Receptor-Mediated Inflammatory Responses in Monocyte-Derived Macrophage-Like Cells to Mycobacterium tuberculosis by Modulating the PI3K/Akt/mTOR Signaling Pathway.In *Mediators Inflamm*.On 2018 Sep by Yang Y, Sun Y et al..PMID:30356420, , (2018)

[PMID:30356420](#)

el at., Risperidone ameliorated A ϵ Y1-42-induced cognitive and hippocampal synaptic impairments in mice.In *Behav Brain Res* on 2017 Mar 30 by Lingzhi Wu , Xiaowen Feng,et al..PMID: 28093254, , (2017)

[PMID:28093254](#)

el at., Efficient Expression of Stable Recombinant Human Insulin-Like Growth factor-1 Fusion With Human Serum Albumin in Chinese Hamster Ovary Cells.In *Prep Biochem Biotechnol* on 2017 Aug 9 by Aini Wan , Dongsheng Xu,et al..PMID: 28281882, , (2017)

[PMID:28281882](#)

el at., Hydrogen Sulfide Ameliorated L-NAME-induced Hypertensive Heart Disease by the Akt/eNOS/NO Pathway. In *Exp Biol Med (Maywood)* on 2017 Dec by Sheng Jin, Xu Teng,et al..PMID: 28971696, , (2017)

[PMID:28971696](#)

el at., Knockdown of PRDX2 Sensitizes Colon Cancer Cells to 5-FU by Suppressing the PI3K/AKT Signaling Pathway.In *Biosci Rep* on 2017 May 11 by Jun Xu, Shouru Zhang,et al..PMID: 28432271, , (2017)

[PMID:28432271](#)

el at., MACC1 facilitates chemoresistance and cancer stem cell like properties of colon cancer cells through the PI3K/AKT signaling pathway.In *Mol Med Rep* on 2017 Dec by Jiankai Wang , Wenjuan Wang,et al..PMID: 28990068, , (2017)

[PMID:28990068](#)

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., Functional ζ E--Opioid-Galanin Receptor Heteromers in the Ventral Tegmental Area.In *J Neurosci* on 2017 Feb 1 by Estefani a Moreno, C θ sar Quiroz,et al..PMID: 28007761, , (2017)

[PMID:28007761](#)

el at., Heteroreceptor Complexes Formed by Dopamine D 1, Histamine H 3, and N-Methyl-D-Aspartate Glutamate Receptors as Targets to Prevent Neuronal Death in Alzheimer's Disease.In *Mol Neurobiol* on 2017 Aug by Mar Rodri guez-Ruiz , Estefani a Moreno,et al..PMID: 27370794, , (2017)

[PMID:27370794](#)

el at., Phosphatase and Tensin Homolog Deleted on Chromosome 10 Degradation Induced by NEDD4 Promotes Acquired Erlotinib Resistance in Non-Small-Cell Lung Cancer.In *Tumour Biol* on 2017 Jul by Huake Sun, Huiwen Ma,et al..PMID: 28714370, , (2017)

[PMID:28714370](#)

el at., Tunneling Nanotubes Promote Intercellular Mitochondria Transfer Followed by Increased Invasiveness in Bladder Cancer Cells.In *Oncotarget* on 2017 Feb 28 by Jinjin Lu, Xiufen Zheng,et al..PMID: 28107184, , (2017)

[PMID:28107184](#)

el at., Propranolol Sensitizes Thyroid Cancer Cells to Cytotoxic Effect of Vemurafenib.In *Oncol Rep* on 2016 Sep by Wei-Jun Wei , Chen-Tian Shen et

al..PMID:27432558, , (2016)

[PMID:27432558](#)

el at., Bruceine D induces apoptosis in human chronic myeloid leukemia K562 cells via mitochondrial pathway.In Am J Cancer Res on 2016 Mar 15 by Jian-Ye Zhang, Min-Ting Lin et al..PMID: 27186433, , (2016)

[PMID:27186433](#)

el at., Hepatic SATB1 induces paracrine activation of hepatic stellate cells and is upregulated by HBx.In Sci Rep.On 2016 Nov 24 by Gong J, Tu W et al..PMID:27883059, , (2016)

[PMID:27883059](#)

el at., miR-223 reverses the resistance of EGFR-TKIs through IGF1R/PI3K/Akt signaling pathway.In Int J Oncol.On 2016 May by J Han, F Zhao et al..PMID: 26936292, , (2016)

[PMID: 26936292](#)

el at., Neuroprotective effects of ginseng protein on PI3K/Akt signaling pathway in the hippocampus of D-galactose/AICl3 inducing rats model of Alzheimer's disease.In J Ethnopharmacol on 2016 Feb 17 by Hongyan Li, Tingguo Kang et al..PMID: 26721223, , (2016)

[PMID:26721223](#)

el at., Second-generation antisense oligonucleotides against ϵ^{Y} -catenin protect mice against diet-induced hepatic steatosis and hepatic and peripheral insulin resistance.In FASEB J on 2016 Mar by Violeta B Popov, Francois R Jornayvaz et al ..PMID: 26644352, , (2016)

[PMID:26644352](#)

el at., miR-1273g-3p Modulates Activation and Apoptosis of Hepatic Stellate Cells by Directly Targeting PTEN in HCV-related Liver Fibrosis .In FEBS Lett on 2016 Aug by Xuemin Niu , Na Fu et al..PMID: 27423040, , (2016)

[PMID:27423040](#)

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 Effects of Xiangqing Anodyne Spray on treating acute soft-Tissue injury mainly depend on suppressing activations of AKT and p38 pathways.In Evid Based Complement Alternat Med on 2016 by Shudong Wang , Tao Li et al..PMID:27190541, , (2016)

[PMID:27190541](#)

el at., An alternatively spliced variant of CXCR3 mediates the metastasis of CD133+ liver cancer cells induced by CXCL9.In Oncotarget on 2016 Mar 22 by Qiang Ding, Yujia Xia et al..PMID:26883105, , (2016)

[PMID:26883105](#)

el at., Genipin derivatives protect RGC-5 from sodium nitroprusside-induced nitrosative stress. In Int J Mol Sci on 2016 Jan 19 by Rikang Wang, Jiaqiang Zhao,et al..PMID:26797604, , (2016)

[PMID:26797604](#)

el at., A MicroRNA Signature in Gestational Diabetes Mellitus Associated With Risk of Macrosomia.In Cell Physiol Biochem on 2015 by Jiandong Li, Liping Song et al..PMID:26302821, , (2015)

[PMID:26302821](#)

el at., SDF-1/CXCR4 promotes F5M2 osteosarcoma cell migration by activating the Wnt/ ϵ^{Y} -catenin signaling pathway.In Med Oncol on 2015 Jul by Yao Lu, Bin Hu et al..PMID:26026718, , (2015)

[PMID:26026718](#)

el at., Protective effect of remote limb ischemic preconditioning on the liver grafts of rats with a novel model.In PLoS One on 2015 Mar 18 by Junjun

Jia, Jianhui Li et al..PMID:25785455, , (2015)

[PMID:25785455](#)

el at., Orexin1 ζ • orticotropin-releasing factor receptor heteromers in the ventral tegmental area as targets for cocaine.In J Neurosci on 2015 Apr 29 by Gemma Navarro , Cθ sar Quiroz et al..PMID: 25926444 , , (2015)

[PMID:25926444](#)

el at., Combinational treatment of curcumin and quercetin against gastric cancer MGC-803 cells in vitro Molecules on 2015 Jun 22 by Jian-Ye Zhang , Min-Ting Lin et al..PMID:26111180 , , (2015)

[PMID:26111180](#)

el at., SNAILs promote G1 phase in selected cancer cells.In Int J Oncol on 2015 Nov by Ya-Lan Wu , Jian-Xin Xue et al ..PMID:26352801, , (2015)

[PMID:26352801](#)

el at., LIM domain only 2 induces glioma invasion via cytosolic p27KIP1.In Tumour Biol on 2016 Feb by Cheol Gyu Park, Young-Woo Sohn et al..PMID: 26383528, , (2015)

[PMID:26383528](#)

el at., Orexin-corticotropin-releasing factor receptor heteromers in the ventral tegmental area as targets for cocaine.In J Neurosci on 2015 Apr 29 by Gemma Navarro, Cθ sar Quiroz et al..PMID: 25926444 , , (2015)

[PMID:25926444](#)

el at., A solid-phase combinatorial approach for indoloquinolizidine-peptides with high affinity at D1 and D2 dopamine receptors. In Eur J Med Chem on 2015 Jun 5 by Anabel Molero, Marc Vendrell, et al..PMID: 25969169, , (2015)

[PMID:25969169](#)

el at., The use of hollow mesoporous silica nanospheres to encapsulate bortezomib and improve efficacy for non-small cell lung cancer therapy.In Biomaterials.On 2014 Jan by Shen J, Song G et al..PMID:24125776, , (2014)

[PMID:24125776](#)

el at., Helium preconditioning protects mouse liver against ischemia and reperfusion injury through the PI3K/Akt pathway.In J Hepatol on 2014 Nov by Rongjia Zhang , Ling Zhang et al..PMID:24972044, , (2014)

[PMID:24972044](#)

el at., SOCS3 methylation in synergy with Reg3A overexpression promotes cell growth in pancreatic cancer.In J Mol Med (Berl) on 2014 Dec by Jun Wang, Hong Zhou et al..PMID: 24996521, , (2014)

[PMID:24996521](#)

el at., Enhanced Proliferation of Bone Marrow Mesenchymal Stem Cells by Co-Culture With TM4 Mouse Sertoli Cells: Involvement of the EGF/PI3K/AKT Pathway .In Mol Cell Biochem on 2014 Aug byHuan Tian , Meijin Guo et al..PMID:24748323, , (2014)

[PMID:24748323](#)

el at., The role of NAD⁺-dependent isocitrate dehydrogenase 3 subunit δ O in AFB1 induced liver lesion.In Toxicol Lett on 2014 Jan 30 by Chi Yang , Jue Fan et al..PMID:24211421, , (2014)

[PMID:24211421](#)

el at., Activation of liver X receptor enhances the proliferation and migration of endothelial progenitor cells and promotes vascular repair through PI3K/Akt/eNOS signaling pathway activation.In Vascul Pharmacol on 2014 Sep et al..PMID: 24892989, , (2014)

[PMID:24892989](#)

el at., Antitumour activity of the recombination polypeptide GST-NT21MP is mediated by inhibition of CXCR4 pathway in breast cancer.In Br J Cancer on 2014 Mar 4 by Tiefeng Jin, Jingchun Jin et al ..PMID:24629131, , (2014)

[PMID:24629131](#)

el at., Impaired tumor angiogenesis and VEGF-induced pathway in endothelial CD146 knockout mice.In Protein Cell on 2014 Jun by Qiqun Zeng , Zhenzhen Wu et al..PMID: 24756564, , (2014)

[PMID:24756564](#)

el at., FHL1C induces apoptosis in notch1-dependent T-ALL cells through an interaction with RBP-J. In BMC Cancer on 2014 Jun 22 by Wei Fu, Kai Wang, et al..PMID:24952875

, , (2014)

[PMID:24952875](#)

Fang Wang, Ting Li, Bin Zhang el at., MicroRNA-19a/b regulates multidrug resistance in human gastric cancer cells by targeting PTEN., Biochemical and Biophysical Research Communications, 434(3):688η— C694(2013)

[PMID:23603256](#)

Hongxia Zhanga, Junjie Houb, Ruina Cuia el at., Phosphoproteome analysis reveals an important role for glycogen synthase kinase-3 in perfluorododecanoic acid-induced rat liver toxicity, Toxicology Letters, 218(1):61-69(2013)

[PMID:23353032](#)

Jia J, Xu X, Liu F el at., Identification, Design and Bio-Evaluation of Novel Hsp90 Inhibitors by Ligand-Based Virtual Screening. , PLoS ONE, 8(4): e59315(2013)

[PMID:23565147](#)

Peter Schubert, Danielle Coupland, Brankica Culibrk el at., Riboflavin and ultraviolet light treatment of platelets triggers p38MAPK signaling: inhibition significantly improves in vitro platelet quality after pathogen reduction treatment., TRANSFUSION., 53(12):3164-3173.(2013)

[PMID:23521225](#)

Shen J el at., The use of hollow mesoporous silica nanospheres to encapsulate bortezomib and improve efficacy for non-small cell lung cancer therapy, Biomaterials, Biomaterials, 35(1):316η— C326(2013)

[PMID:24125776](#)

Yunye Ning, Haidong Huang, Yuchao Dong el at., 5-Aza-20-deoxycytidine inhibited PDGF-induced rat airway smooth muscle cell phenotypic switching., Arch Toxicol, 87(5):871η— C881(2013)

[PMID:23423710](#)

el at., 5-Aza-2'-deoxycytidine inhibited PDGF-induced rat airway smooth muscle cell phenotypic switching.In Arch Toxicol on 2013 May by Ning Y, Huang H,et al..PMID: 23423710, , (2013)

[PMID:23423710](#)

el at., Cellular mechanism by which estradiol protects female ovariectomized mice from high-fat diet-induced hepatic and muscle insulin resistance.In Endocrinology on 2013 Mar by Camporez JP, Jornayvaz FR,et al..PMID:23364948, , (2013)

[PMID:23364948](#)

el at., Loss of Fatty Acid Synthase Inhibits the "HER2-PI3K/Akt Axis" Activity and Malignant Phenotype of Caco-2 Cells.In Lipids Health Dis on 2013 Jun 1 by Nan Li, Heng Lu,et al..PMID:23725225, , (2013)

[PMID:23725225](#)

el at., Influence of gefitinib and erlotinib on apoptosis and c-MYC expression in H23 lung cancer cells.In Anticancer Res on 2013 Apr by Mitsuhiro Suenaga, Masatatsu Yamamoto,et al..PMID:23564796, , (2013)

[PMID:23564796](#)

el at., P21-Activated Protein Kinase 1 (Pak1) Mediates the Cross Talk between Insulin and ε^oY-Catenin on Proglucagon Gene Expression and Its Ablation Affects Glucose

Homeostasis in Male C57BL/6 Mice. In Endocrinology on 2013 Jan by Yuting Alex Chiang , Weijuan Shao, et al..PMID: 23183186, , (2013)

[PMID:23183186](#)

el at., Identification, design and bio-evaluation of novel Hsp90 inhibitors by ligand-based virtual screening. In PLoS One on 2013 by JianMin Jia, XiaoLi Xu, et al..PMID: 23565147, , (2013)

[PMID:23565147](#)

el at., PP2A inhibition results in hepatic insulin resistance despite Akt2 activation. In Aging (Albany NY) on 2013 Oct by Thomas Galbo, Rachel J Perry, et al..PMID:24150286, , (2013)

[PMID:24150286](#)

el at., Atrial natriuretic peptide suppresses Th17 development through regulation of cGMP-dependent protein kinase and PI3K/ζ-akt signaling pathways. In Regul Pept on 2013 Feb 10 by Libing Ma, Jinxiu Li, et al..PMID: 23327998, , (2013)

[PMID:23327998](#)

el at., FLZ alleviates the memory deficits in transgenic mouse model of Alzheimer's disease via decreasing beta-amyloid production and tau hyperphosphorylation. In PLoS One

on 2013 Nov 4 by Xiu-Qi Bao, Ning Li, et al..PMID: 24223757, , (2013)

[PMID:24223757](#)

Heng-Fei Luan, Zhi-Bin Zhao, Qi-Hong Zhao el at., Hydrogen sulfide postconditioning protects isolated rat hearts against ischemia and reperfusion injury mediated by the JAK2/STAT3 survival pathway, Braz J Med Biol Res, 45(10):898-905(2012)

[PMID:22948409](#)

Lucía Callón, Estefanía Moreno, Pedro Barroso-Chinea el at., Cannabinoid Receptors CB1 and CB2 Form Functional Heteromers in Brain., THE JOURNAL OF BIOLOGICAL CHEMISTRY, VOL. 287, NO. 25, pp. 20851-20865(2012)

[PMID:22532560](#)

el at., Monocyte to macrophage differentiation-associated (MMD) positively regulates ERK and Akt activation and TNF-α and NO production in macrophages. In Mol Biol Rep on 2012 May by Liu Q, Zheng J, et al..PMID:22203480, , (2012)

[PMID:22203480](#)

el at., The Wnt Signaling Pathway Effector TCF7L2 Is Upregulated by Insulin and Represses Hepatic Gluconeogenesis. In Am J Physiol Endocrinol Metab on 2012 Nov 1 by Wilfred Ip, Weijuan Shao, et al..PMID:22967502, , (2012)

[PMID:22967502](#)

el at., Cannabinoid receptors CB1 and CB2 form functional heteromers in brain. In J Biol Chem on 2012 Jun 15 by Lucía Callón, Estefanía Moreno, et al..PMID: 22532560, , (2012)

[PMID:22532560](#)

el at., NCS-1 Associates With Adenosine A(2A) Receptors and Modulates Receptor Function. In Front Mol Neurosci on 2012 Apr 18 by Gemma Navarro, Johannes Hradsky,

et al..PMID: 22529776, , (2012)

[PMID:22529776](#)

el at., Notch-induced hIL-6 production facilitates the maintenance of self-renewal of hCD34+ cord blood cells through the activation of Jak-PI3K-STAT3 pathway. In Am J Pathol

on 2012 Jan by Bongkum Choi, Eunyoung Chun, et al..PMID:22062221, , (2012)

[PMID:22062221](#)

el at., CD146 is a coreceptor for VEGFR-2 in tumor angiogenesis. In Blood on 2012 Sep 13 by Tianxia Jiang, Jie Zhuang, et al..PMID: 22718841, , (2012)

[PMID:22718841](#)

Hu Ma, Quan Yao, An-Mei Zhang el at., The Effects of Artesunate on the Expression of EGFR and ABCG2 in A549 Human Lung Cancer Cells and a Xenograft Model., Molecules, 16:10556-10569(2011)

[PMID:22183882](#)

Marc Vendrell, Anabel Molero, Sergio González el at., Biotin Ergopeptide Probes for Dopamine Receptors., J. Med. Chem., 54, 1080-1090(2011)

[PMID:21280602](#)

Yingjia Guo, Tong Yang, Jun Lu el at., Rb1 postconditioning attenuates liver warm ischemia/reperfusion injury through ROS-NO-HIF pathway., Life Sciences, 88(13-14):598-605(2011)

[PMID:21300075](#)

el at., Ischemic Postconditioning Attenuates Liver Warm Ischemia-Reperfusion Injury Through Akt-eNOS-NO-HIF Pathway. In J Biomed Sci on 2011 Oct 28 by Jia Y Guo, Tong Yang, et al.. PMID:22035453, , (2011)

[PMID:22035453](#)

el at., Rb1 postconditioning attenuates liver warm ischemia-reperfusion injury through ROS-NO-HIF pathway. In Life Sci on 2011 Mar 28 by Guo Yi Yang T, et al.. PMID:21300075, , (2011)

[PMID:21300075](#)

el at., The effects of artesunate on the expression of EGFR and ABCG2 in A549 human lung cancer cells and a xenograft model. In Molecules on 2011 Dec 19 by Ma H1, Yao Q, et al.. PMID:22183882, , (2011)

[PMID:22183882](#)

el at., Canonical notch pathway protects hepatocytes from ischemia/reperfusion injury in mice by repressing reactive oxygen species production through JAK2/STAT3 signaling. In Hepatology on 2011 Sep 2 by Yu HC, Qin HY, et al.. PMID:21633967, , (2011)

[PMID:21633967](#)

el at., Biotin ergopeptide probes for dopamine receptors. In J Med Chem on 2011 Feb 24 by Marc Vendrell, Anabel Molero, et al.. PMID: 21280602, , (2011)

[PMID:21280602](#)

Ning LI, Geng-tao LIU el at., The novel squamosamide derivative FLZ enhances BDNF/TrkB/CREB signaling and inhibits neuronal apoptosis in APP/PS1 mice., Acta Pharmacologica Sinica., 31: 265η— C272(2010)

[PMID:20154710](#)

Sheng-Li Lin, Li-Ying Yan, Xin-Tian Zhang el at., ER-α36, a Variant of ER-α, Promotes Tamoxifen Agonist Action in Endometrial Cancer Cells via the MAPK/ERK and PI3K/Akt Pathways., PLoS ONE, 5(2): e9013. doi:10.1371/journal.pone.0009013 (2010)

[PMID:20126312](#)

el at., Activation of Akt/FoxO signaling pathway contributes to induction of neuroprotection against transient global cerebral ischemia by hypoxic pre-conditioning in adult rats. In J Neurochem on 2010 Aug by Zhan L, Wang T, et al.. PMID:20492357, , (2010)

[PMID:20492357](#)

el at., The novel squamosamide derivative FLZ enhances BDNF/TrkB/CREB signaling and inhibits neuronal apoptosis in APP/PS1 mice. In Acta Pharmacol Sin on 2010 Mar by Li N, Liu GT et al.. PMID:20154710, , (2010)

[PMID:20154710](#)

el at., Transactivation of human osteopontin promoter by human T-cell leukemia virus type 1-encoded Tax protein. In Leuk Res on 2010 Jun by Zhang J, Yamada O, et al.. PMID:19767100, , (2010)

[PMID:19767100](#)

el at., ER-δO 36, a variant of ER-δO , promotes tamoxifen agonist action in endometrial cancer cells via the MAPK/ERK and PI3K/Akt pathways. In PLoS One on 2010 Feb 2 by Sheng-Li Lin, Li-Ying Yan, et al.. PMID:20126312, , (2010)

[PMID:20126312](#)

Hui Zhou, Jing Zhao, Xujia Zhang el at., Inhibition of uncoupling protein 2 by genipin reduces insulin-stimulated glucose uptake in 3T3-L1 adipocytes., Archives of Biochemistry and Biophysics, 486(1):88-93(2009)

[PMID:19272350](#)

Li-Nan Ren, Qing-Fang Li, Feng-Jun Xiao el at., Endocrine glands-derived vascular endothelial growth factor protects pancreatic cancer cells from apoptosis via upregulation of the myeloid cell leukemia-1 protein., Biochemical and Biophysical Research Communications, 386 (2009)

35η— C39(2009)

[PMID:19523441](#)

el at., Inhibition of Uncoupling Protein 2 by Genipin Reduces Insulin-Stimulated Glucose Uptake in 3T3-L1 Adipocytes. In Arch Biochem Biophys on 2009 Jun 1 by Hui Zhou, Jing Zhao, et al.. PMID:19272350, , (2009)

[PMID:19272350](#)

el at., Endocrine Glands-Derived Vascular Endothelial Growth Factor Protects Pancreatic Cancer Cells From Apoptosis via Upregulation of the Myeloid Cell leukemia-1 Protein. In *Biochem Biophys Res Commun* on 2009 Aug 14 by Li-Nan Ren, Qing-Fang Li, et al.. PMID:19523441, , (2009)
[PMID:19523441](#)

el at., Neuregulin-1 Enhances Differentiation of Cardiomyocytes From Embryonic Stem Cells. In *Med Biol Eng Comput* on 2009 Jan by Zhi Wang, Guotong Xu, et al.. PMID: 18712425, , (2009)
[PMID:18712425](#)

Seyoon Kim, Yong Zu Lee, Yu Sam Kim et al., A Proteomic approach for protein-profiling the oncogenic ras induced transformation (H-, K-, and N-Ras) in NIH/3T3 mouse embryonic fibroblasts., *Proteomics*, 8 (15), 3082 - 3093(2008)
[PMID:18601226](#)

Young Yil Bahk, Ick-Hyun Cho, Tong Soo Kim et al., A Cross-talk between oncogenic Ras and tumor suppressor PTEN through FAK Tyr861 phosphorylation in NIH/3T3 mouse embryonic fibroblasts., *Biochemical and Biophysical Research Communications*, 377(4):1199— C1204.(2008)
[PMID:19000654](#)

el at., A Proteomic approach for protein profiling the oncogenic ras induced transformation (H-, K-, and N-Ras) in NIH/3T3 mouse embryonic fibroblasts. In *Proteomics* on 2008 Aug by Seyoon Kim, Yong Zu Lee, et al.. PMID:18601226, , (2008)
[PMID:18601226](#)

el at., A cross-talk between oncogenic Ras and tumor suppressor PTEN through FAK Tyr861 phosphorylation in NIH/3T3 mouse embryonic fibroblasts. In *Biochem Biophys Res Commun* on 2008 Dec 26 by Young Yil Bahk, Ick-Hyun Cho, et al.. PMID:19000654, , (2008)
[PMID:19000654](#)

Zhi Wang, Guotong Xu, Yalan Wu et al., Neuregulin-1 enhances differentiation of cardiomyocytes from embryonic stem cells., *Medical and Biological Engineering and Computing*, 47(1):41— C48(2007)
[PMID:18712425](#)

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