

JNK1/JNK2/JNK3 Antibody

Catalog No: #21504



Package Size: #21504-1 50ul #21504-2 100ul

Orders: order@signalwayantibody.com

Support: tech@signalwayantibody.com

Description

Product Name	JNK1/JNK2/JNK3 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	Human;Mouse;Rat
Specificity	The antibody detects endogenous level of total JNK1/JNK2/JNK3(Ab-183/185) protein.
Immunogen Type	Peptide-KLH
Immunogen Description	Peptide sequence around aa.182~186 (M-T-P-Y-V) derived from Human JNK1 JNK2 JNK3.
Conjugates	Unconjugated
Target Name	JNK1 JNK2 JNK3
Other Names	PRKM8; SAPK1;PRKM9;SAPK1A;JNK3A
Accession No.	Swiss-Prot: P45983 P45984 P53779 NCBI Protein: NP_620637.1/NP_002743.3/NP_620448.1 NCBI mRNA:NM_139049.3/NM_002752.4/NM_138982.3
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.

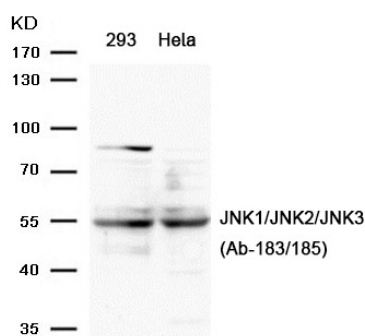
Application Details

Predicted MW: 46/54kd

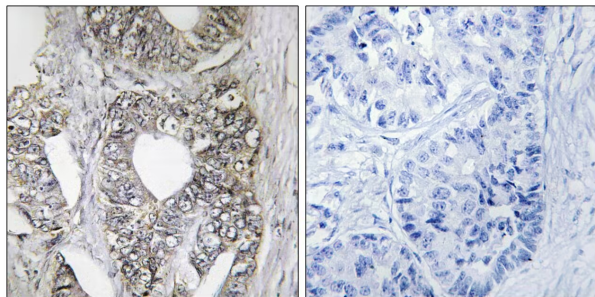
Western blotting: 1:500~1:1000

IHC 1:50-300

Images



Western blot analysis of extracts from 293 and HeLa cells using JNK1/JNK2/JNK3(Ab-183/185) Antibody #21504.



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma tissue.

Background

Serine/threonine-protein kinase involved in various processes such as cell proliferation, differentiation, migration, transformation and programmed cell death. Extracellular stimuli such as proinflammatory cytokines or physical stress stimulate the stress-activated protein kinase/c-Jun N-terminal kinase (SAP/JNK) signaling pathway. In this cascade, two dual specificity kinases MAP2K4/MKK4 and MAP2K7/MKK7 phosphorylate and activate MAPK8/JNK1. In turn, MAPK8/JNK1 phosphorylates a number of transcription factors, primarily components of AP-1 such as JUN, JDP2 and ATF2 and thus regulates AP-1 transcriptional activity. Phosphorylates the replication licensing factor CDT1, inhibiting the interaction between CDT1 and the histone H4 acetylase HBO1 to replication origins. Loss of this interaction abrogates the acetylation required for replication initiation. Promotes stressed cell apoptosis by phosphorylating key regulatory factors including p53/TP53 and Yes-associated protein YAP1. In T-cells, MAPK8 and MAPK9 are required for polarized differentiation of T-helper cells into Th1 cells. Contributes to the survival of erythroid cells by phosphorylating the antagonist of cell death BAD upon EPO stimulation. Mediates starvation-induced BCL2 phosphorylation, BCL2 dissociation from BECN1, and thus activation of autophagy. Phosphorylates STMN2 and hence regulates microtubule dynamics, controlling neurite elongation in cortical neurons. In the developing brain, through its cytoplasmic activity on STMN2, negatively regulates the rate of exit from multipolar stage and of radial migration from the ventricular zone. Phosphorylates several other substrates including heat shock factor protein 4 (HSF4), the deacetylase SIRT1, ELK1, or the E3 ligase ITCH. Phosphorylates the CLOCK-ARNTL/BMAL1 heterodimer and plays a role in the regulation of the circadian clock (PubMed:22441692). Phosphorylates the heat shock transcription factor HSF1, suppressing HSF1-induced transcriptional activity (PubMed:10747973).

Published Papers

el at., Astragalus polysaccharides exerts anti-infective activity by inducing human cathelicidin antimicrobial peptide LL-37 in respiratory epithelial cells. In *Phytother Res*. On 2018 Aug by Zhao L, Tan S et al.. PMID: 29672953, , (2018)

[PMID:29672953](#)

el at., Ajudecumin A from *Ajuga ovalifolia* var. *calantha* exhibits anti-inflammatory activity in lipopolysaccharide-activated RAW264.7 murine macrophages and animal models of acute inflammation. In *Pharm Biol*. On 2018 Dec by Zhang H, Ren QC et al.. PMID: 31070535, , (2018)

[PMID:31070535](#)

el at., HMG2 regulates non-tuberculous mycobacteria survival via modulation of M1 macrophage polarization. In *J Cell Mol Med* on 2019 Dec by Wang X, Chen S, et al.. PMID:31596045, , (2019)

[PMID:31596045](#)

el at., Targeting p53 via JNK pathway: a novel role of RITA for apoptotic signaling in multiple myeloma. In *PLoS One* on 2012 by Manujendra N Saha, Hua Jiang, et al.. PMID: 22276160, , (2012)

[PMID:22276160](#)

el at., Ellagic Acid Inhibits RANKL-induced Osteoclast Differentiation by Suppressing the p38 MAP Kinase Pathway. In *Arch Pharm Res* on 2017 Jan by Mpho Rantlha, Travers Sagar, et al.. PMID: 27384064, , (2017)

[PMID:27384064](#)

el at., Induction of Mkp-1 and Nuclear Translocation of Nrf2 by Limonoids From *Khaya grandifoliola* C.DC Protect L-02 Hepatocytes Against Acetaminophen-Induced Hepatotoxicity. In *Front Pharmacol* on 2017 Sep 19 by Arnaud F Kouam, Fei Yuan, et al.. PMID: 28974930, , (2017)

[PMID:28974930](#)

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., Cannabinoid receptor agonist WIN55,212-2 and fatty acid amide hydrolase inhibitor URB597 suppress chronic cerebral hypoperfusion-induced neuronal apoptosis by inhibiting c-Jun N-terminal kinase signaling. In Neuroscience 2015 Aug 20 by S-H Su , Y-F Wu et al..PMID:25795598, , (2015)

[PMID:25795598](#)

el at., Byakangelicin protects against carbon tetrachloride-induced liver injury and fibrosis in mice. In J Cell Mol Med on 2020 Aug by Xiaohe Li, Shuaibo Shao, et al..PMID: 32643868, , (2020)

[PMID:32643868](#)

el at., Endoplasmic reticulum stress is involved in retinal injury induced by repeated transient spikes of intraocular pressure. In J Zhejiang Univ Sci B on 2021 Sept 15 by Xue Yang, Xiaowei Yu et al..PMID: 34514754, , (2021)

[PMID:34514754](#)

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., Brevilin A Ameliorates Acute Lung Injury and Inflammation Through Inhibition of NF- κ B 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., 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., Differential apoptosis gene expressions of rhabdomyosarcoma cells in response to enterovirus 71 infection. In BMC Infect Dis on 2012 Nov 28 by Shi W, Li X, et al..PMID:23191987, , (2012)

[PMID:23191987](#)

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