

## JNK1/JNK2/JNK3(Ab-183/185) Antibody

Catalog No: #21504

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

## Description

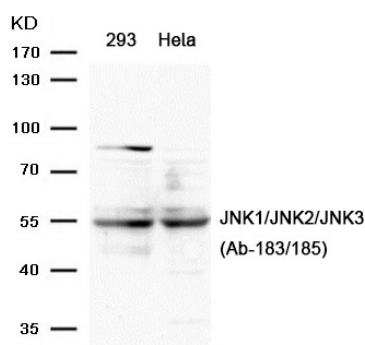
|                       |                                                                                                                                                                               |
|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product Name          | JNK1/JNK2/JNK3(Ab-183/185) 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                                                                                                                                                                            |
| Species Reactivity    | Hu Ms Rt                                                                                                                                                                      |
| 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 <sup>2+</sup> and Ca <sup>2+</sup> ), 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

## Images



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

## 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-associates 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)

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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)

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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)

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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)

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[PMID:32643868](#)

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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](#)

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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](#)

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

[PMID:35774606](#)

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el at., Alleviative effects of  $\alpha$ -lipoic acid on muscle atrophy via the modulation of TNF- $\alpha$ /JNK and PI3K/AKT pathways in high-fat diet and streptozotocin-induced type 2 diabetic ratsInFood Sci NutrOn2023 Jan 12byChih-Yuan Ko 1 2 3, Chi-Hao Wu et al..PMID: 37051351, , (2023)

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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](#)

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