

Datasheet for ABIN6262710

anti-JNK antibody**5** Images**3** Publications[Go to Product page](#)

Overview

Quantity:	100 µL
Target:	JNK (MAPK8)
Reactivity:	Human, Mouse, Rat, Pig
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This JNK antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunofluorescence (IF), Immunocytochemistry (ICC)

Product Details

Immunogen:	A synthesized peptide derived from human JNK1/2/3
Isotype:	IgG
Specificity:	JNK1/2/3 Antibody detects endogenous levels of total JNK1/2/3
Cross-Reactivity:	Human, Mouse (Murine), Pig (Porcine), Rat (Rattus)
Purification:	The antiserum was purified by peptide affinity chromatography using SulfoLink™ Coupling Resin (Thermo Fisher Scientific).

Target Details

Target:	JNK (MAPK8)
Alternative Name:	JNK1/2/3 (MAPK8 Products)
Background:	Description: Serine/threonine-protein kinase involved in various processes such as cell

Target Details

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).

Gene: MAPK8

Molecular Weight:	46+54kDa
Gene ID:	5599
UniProt:	P45983 , P45984 , P53779
Pathways:	MAPK Signaling , WNT Signaling , TLR Signaling , Fc-epsilon Receptor Signaling Pathway , Neurotrophin Signaling Pathway , Activation of Innate immune Response , Hepatitis C , Toll-Like Receptors Cascades , Signaling of Hepatocyte Growth Factor Receptor , S100 Proteins

Application Details

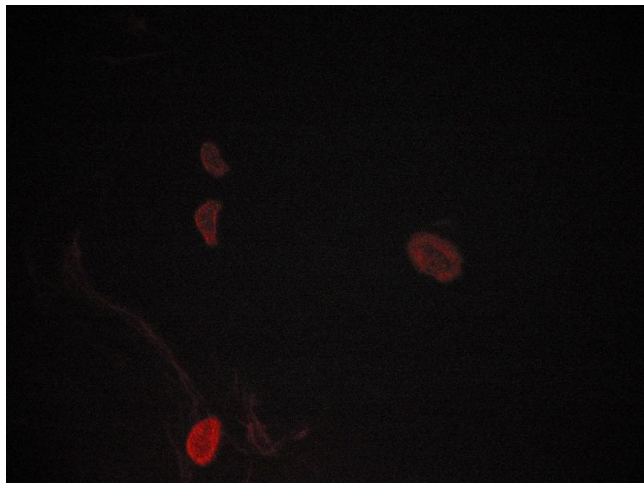
Application Notes:	WB 1:500-1:2000 IF/ICC 1:100-1:500
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	1 mg/mL
Buffer:	Rabbit IgG in phosphate buffered saline , pH 7.4, 150 mM NaCl, 0.02 % sodium azide and 50 % glycerol.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C
Storage Comment:	Store at -20 °C.Stable for 12 months from date of receipt
Expiry Date:	12 months

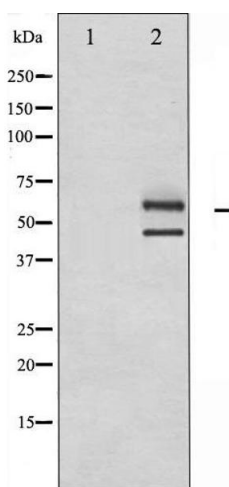
Publications

Product cited in:	<p>Geng, Yang, Wang, Zhang, Hu, Gu, Li: "Trimethylamine N-oxide promotes atherosclerosis via CD36-dependent MAPK/JNK pathway." in: Biomedicine & pharmacotherapy, Vol. 97, pp. 941-947, (2018) (PubMed).</p> <p>Ji, Yuan, Yuan, Xia, Yang: "The p75 neurotrophin receptor might mediate sepsis-induced synaptic and cognitive impairments." in: Behavioural brain research, Vol. 347, pp. 339-349, (2018) (PubMed).</p> <p>Zou, Xiang, Wang, Peng, Wei: "Oregano Essential Oil Improves Intestinal Morphology and Expression of Tight Junction Proteins Associated with Modulation of Selected Intestinal Bacteria and Immune Status in a Pig Model." in: BioMed research international, Vol. 2016, pp. 5436738, (2017) (PubMed).</p>
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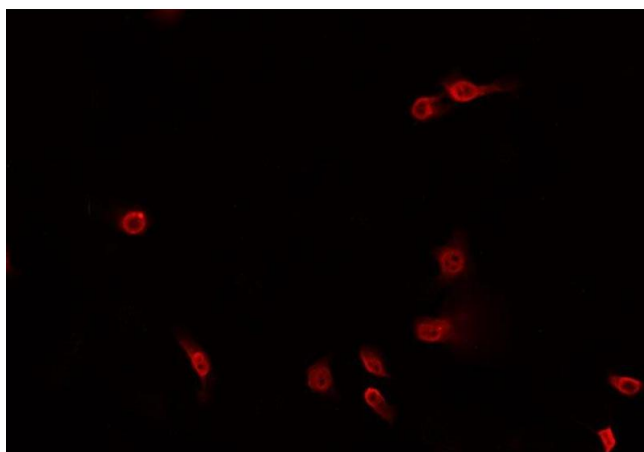
Immunofluorescence (fixed cells)

Image 1. ABIN6269260 staining lovo cells by ICC/IF. Cells were fixed with PFA and permeabilized in 0.1% saponin prior to blocking in 10% serum for 45 minutes at 37°C. The primary antibody was diluted 1/400 and incubated with the sample for 1 hour at 37°C. A Alexa Fluor® 594 conjugated goat polyclonal to rabbit IgG (H+L), diluted 1/600 was used as secondary antibody.



Western Blotting

Image 2. Western blot analysis of JNK1/2/3 expression in UV treated 293 whole cell lysates. The lane on the left is treated with the antigen-specific peptide.



Immunofluorescence (fixed cells)

Image 3. ABIN6269260 staining HeLa cells by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25°C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37°C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) antibody (Cat.# S0006), diluted at 1/600, was used as secondary antibody.

Please check the [product details page](#) for more images. Overall 5 images are available for ABIN6262710.