Anti-JNK1+JNK3 Antibody [JJ08-86]

ET1701-47

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human, Mouse, Rat
Applications:	WB, IP, IHC-P
Molecular Wt:	Predicted band size: 48/53 kDa
Clone number:	JJ08-86

Description: c-Jun N-terminal kinases (JNKs) phosphorylate and augment transcriptional activity of c-Jun. JNKs originate from three genes that yield 10 isoforms through alternative mRNA splicing, including JNK1a1,JNK1b1, JNK2a1, JNK2b1, and JNK3a1, which represent the p46 isoforms, and JNK1a2, JNK1b2, JNK2a2, JNK2b2, and JNK3b2, which represent the p54 isoforms.JNKs coordinate cell responses to stress and influence regulation of cell growth and transformation. The human JNK1 (PRKM8, SAPK1, MAPK8) gene maps to chromosome 10q11.22 and shares 83% amino acid identity with JNK2. JNK1 is necessary for normal activation and differentiation of CD4 helper T (TH) cells into TH1 and TH2 effector cells. Capsaicin activates JNK1 and p38 in ras-transformed human breast epithelial cells. Nitrogen oxides (NOx) upregulate JNK1 in addition to c-Fos, c-Jun, and other signaling kinases, including MEKK1 and p38. JNK3 (MK10, MAPK10, PRKM10) is activated by pro-inflammatory cytokines and environmental stresss by phosphorylating transcription factors such as c-Jun and ATF2. This is important for AP-1 transcriptional activity regulation. JNK3 is crucial for neuronal apoptosis (stress-induced).

Immunogen: Recombinant protein within Human JNK1 + JNK3 aa 1-423 / 427.

Positive control: NIH/3T3 cell lysate, PC-12 cell lysate, human brain tissue.

Subcellular location: Cytoplasm, Nucleus, Membrane, Mitochondrion.

Database links: SwissProt: P45983 Human | P53779 Human | Q61831 Mouse | Q91Y86 Mouse | P49185 Rat | P49187 Rat

Recommended Dilutions:

WB	1:1,000-1:2,000
IP	Use at an assay dependent concentration.
IHC-P	1:200-1:1,000

Storage Buffer: 1*TBS (pH7.4), 0.05% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Store at +4℃ after thawing. Aliquot store at -20℃ or -80℃. Avoid repeated freeze / thaw cycles.

Purity: Protein A affinity purified.

Images

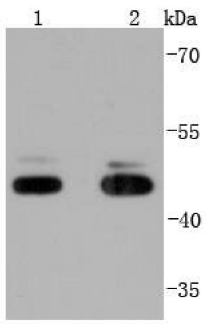

Fig1: Western blot analysis of JNK1+JNK3 on different lysates. Proteins were transferred to a PVDF membrane and blocked with 5% BSA in PBS for 1 hour at room temperature. The primary antibody (ET1701-47, 1/500) was used in 5% BSA at room temperature for 2 hours. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1:200,000 dilution was used for 1 hour at room temperature.
Positive control:
Lane 1: NIH/3T3 cell lysate
Lane 2: PC-12 cell lysate

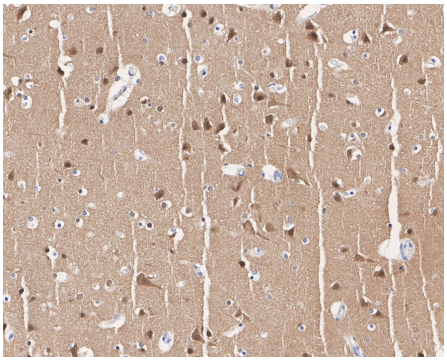

Fig2: Immunohistochemical analysis of paraffin-embedded human brain tissue with Rabbit anti-JNK1+JNK3 antibody (ET1701-47) at 1/1,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) for 2 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (ET1701-47) at 1/1,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

Background References

1. Guo J et al. Berberine Protects Human Umbilical Vein Endothelial Cells against LPS-Induced Apoptosis by Blocking JNK-Mediated Signaling. Evid Based Complement Alternat Med 2016:6983956 (2016).
2. Yang N et al. TNF-a receptor antagonist attenuates isoflurane-induced cognitive impairment in aged rats. Exp Ther Med 12:463-468 (2016).