Anti-JNK1+JNK2+JNK3 Antibody [SA43-06]

ET1601-28

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human, Mouse, Rat, Cow, Monkey, Zebrafish
Applications:	WB, IF-Cell, IF-Tissue, IHC-P, IP
Molecular Wt:	Predicted band size: 48/53 kDa
Clone number:	SA43-06

Description: The c-Jun N-terminal kinases consist of ten isoforms derived from three genes: JNK1 (four isoforms), JNK2 (four isoforms) and JNK3 (two isoforms). Each gene is expressed as either 46 kDa or 55 kDa protein kinases, depending upon how the 3' coding region of the corresponding mRNA is processed. There have been no functional differences documented between the 46 kDa and the 55 kDa isoform, however, a second form of alternative splicing occurs within transcripts of JNK1 and JNK2, yielding JNK1-α, JNK2-α and JNK1-β and JNK2-β. Differences in interactions with protein substrates arise because of the mutually exclusive utilization of two exons within the kinase domain. and JNK2 are found in all cells and tissues. JNK3 is found mainly in the brain, but is also found in the heart and the testes.

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

Positive control: HeLa cell lysate, HEK-293 cell lysate, Jurkat cell lysate, MCF7 cell lysate, NIH/3T3 cell lysate, PC-12 cell lysate, C6 cell lysate, NIH/3T3, human breast cancer tissue, human brain tissue, mouse brain tissue, rat brain tissue.

Subcellular location: Cytoplasm, Nucleus, Membrane, Mitochondrion

Database links: SwissProt: P45983 Human | P45984 Human | P53779 Human | Q61831 Mouse | Q91Y86 Mouse | Q9WTU6 Mouse | P49185 Rat | P49186 Rat | P49187 Rat

Recommended Dilutions:

WB	1:2,000
IF-Cell	1:50
IF-Tissue	1:50
IHC-P	1:400-1:1,000
IP	Use at an assay dependent concentration.

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

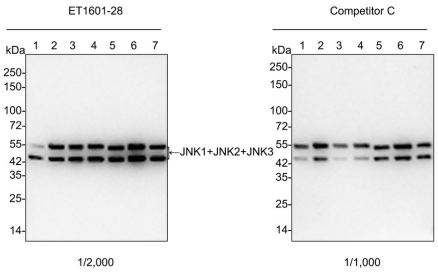

Fig1: Western blot analysis of JNK1+JNK2+JNK3 on different lysates with Rabbit anti-JNK1+JNK2+JNK3 antibody (ET1601-28) at 1/2,000 dilution and competitor's antibody at 1/1,000 dilution.

Lane 1: HeLa cell lysate
Lane 2: HEK-293 cell lysate
Lane 3: Jurkat cell lysate
Lane 4: MCF7 cell lysate
Lane 5: NIH/3T3 cell lysate
Lane 6: PC-12 cell lysate
Lane 7: C6 cell lysate

Lysates/proteins at 15 µg/Lane.

Predicted band size: 48/53 kDa
Observed band size: 48/53 kDa

Exposure time: 35 seconds;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (ET1601-28) at 1/2,000 dilution and competitor's antibody at 1/1,000 dilution were used in 5% NFDM/TBST at 4℃ overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1:50,000 dilution was used for 1 hour at room temperature.

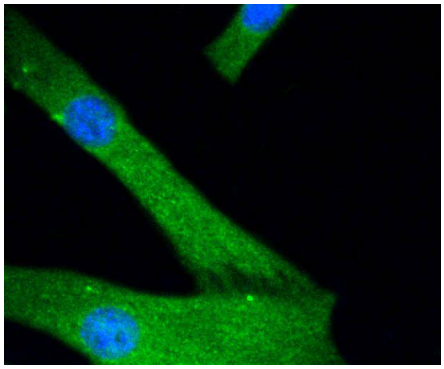

Fig2: ICC staining of JNK1+JNK2+JNK3 in NIH/3T3 cells (green). Formalin fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 10 minutes at room temperature and blocked with 1% Blocker BSA for 15 minutes at room temperature. Cells were probed with the primary antibody (ET1601-28, 1/50) for 1 hour at room temperature, washed with PBS. Alexa Fluor®488 Goat anti-Rabbit IgG was used as the secondary antibody at 1/1,000 dilution. The nuclear counter stain is DAPI (blue).

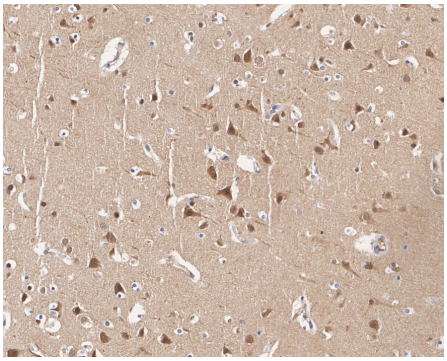

Fig3: Immunohistochemical analysis of paraffin-embedded human brain tissue with Rabbit anti-JNK1+JNK2+JNK3 antibody (ET1601-28) at 1/1,000 dilution.

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 (ET1601-28) 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.

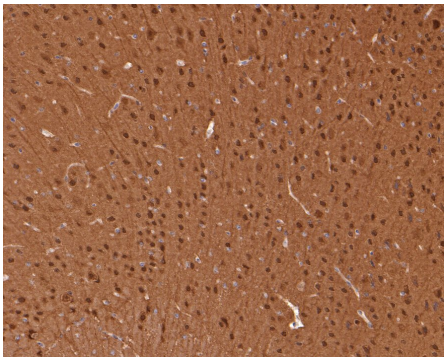

Fig4: Immunohistochemical analysis of paraffin-embedded mouse brain tissue with Rabbit anti-JNK1+JNK2+JNK3 antibody (ET1601-28) at 1/400 dilution.

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 (ET1601-28) at 1/400 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.

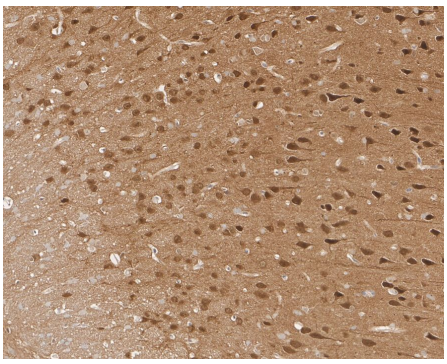

Fig5: Immunohistochemical analysis of paraffin-embedded rat brain tissue with Rabbit anti-JNK1+JNK2+JNK3 antibody (ET1601-28) at 1/1,000 dilution.

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 (ET1601-28) 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. Cantrell, M. et al. 2015. c-Jun N-terminal kinase 2 prevents luminal cell commitment in normal mammary glands and tumors by inhibiting p53/Notch1 and breast cancer gene 1 expression. Oncotarget. 6: 11863-11881.
2. Marampon, F. et al. 2015. Vitamin D protects endothelial cells from irradiation-induced senescence and apoptosis by modulating MAPK/SirT1 axis. Journal of endocrinological investigation.