# Anti-JNK1+JNK2+JNK3 Antibody [SA43-06] ET1601-28

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, 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-a, JNK2-a ond 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   Q91Y06 Mouse   P49185 Rat  P49186 Rat  P49187 Rat   Recommended Dilutions: ':200   WB 1:200   IF-Cell		
Applications:WB, IF-Cell, IF-Tissue, IHC-P, IPMolecular Wt:Predicted band size: 48/53 kDaCione number:SA43-06Description: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-B. 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 itsues. 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.Subcellular location:Sytosprot: P45983 Human   P45984 Human   P53779 Human   Q61831 Mouse   Q91Y86 Mouse   Q90WTU6 Mouse   P49185 Rat   P49186 Rat   P49187 RatRecommended Dilutions:WB 1:2,000-1:5,000 IF-Cell1:200 1:100 1F-CillIP-Use at an assay dependent concentration.Storage Buffer:1*TBS (pH7.4), 0.05% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.Storage Instruction:Shipped at 4°C. Store at +4°C short term (1-2 weeks). It is recommended to aliquot into single-	Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
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Mouse   Q9WTU6 Mouse   P49185 Rat   P49186 Rat   P49187 RatRecommended Dilutions:WB1:2,000-1:5,000IF-Cell1:100IF-Tissue1:200IHC-P1:500-1:1,000IPUse at an assay dependent concentration.Storage Buffer:1*TBS (pH7.4), 0.05% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.Storage Instruction:Shipped at 4°C. Store at +4°C short term (1-2 weeks). It is recommended to aliquot into single-use upon delivery. Store at -20°C long term.	Subcellular location:	Cytoplasm, Nucleus, Membrane, Mitochondrion
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single-use upon delivery. Store at -20 ℃ long term.	Storage Buffer:	1*TBS (pH7.4), 0.05% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.
Purity: Protein A affinity purified.	Storage Instruction:	
	Purity:	Protein A affinity purified.

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Orders:0086-571-88062880

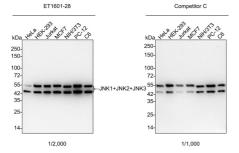
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Applications:WB=Western blot IHC-P=Immunohistochemistry (paraffin) IF-Cell=Immunofluorescence (Cell) IF-Tissue=Immunofluorescence (Tissue) FC=Flow cytometry IP=Immunoprecipitation

#### 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

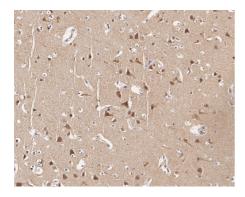
Lysates/proteins at 15 µg/Lane.

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

Exposure time: 35 seconds; ECL: K1801;

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  $4^{\circ}C$  overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.



**Fig2:** 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<sub>2</sub>O 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.

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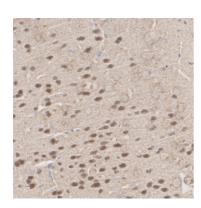
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Applications:WB=Western blot IHC-P=Immunohistochemistry (paraffin) IF-Celt=Immunofluorescence (Celt) IF-Tissue=Immunofluorescence (Tissue) FC=Flow cytometry IP=Immunoprecipitation



**Fig3:** Immunohistochemical analysis of paraffin-embedded mouse 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<sub>2</sub>O 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 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<sub>2</sub>O 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.

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

#### **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.

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