

# Anti-TAK1 Antibody [JM73-19]

ET1705-14



<b>Product Type:</b>	Recombinant Rabbit monoclonal IgG, primary antibodies
<b>Species reactivity:</b>	Human, Mouse, Rat, Monkey
<b>Applications:</b>	WB
<b>Molecular Wt:</b>	Predicted band size: 67 kDa
<b>Clone number:</b>	JM73-19

**Description:** Mitogen-activated protein kinase kinase kinase 7 (MAP3K7), also known as TAK1, is an enzyme that in humans is encoded by the MAP3K7 gene. This kinase has also been shown to regulate downstream cytokine expression such as TNF. Due to its regulation of TNF, TAK1 has become a novel target for the treatment of TNF mediated diseases such as auto immune disease ( Rheumatoid Arthritis, lupus, IBD) but also other cytokine mediated disorders such as chronic pain and cancer. With the advent of novel selective TAK1 inhibitors, groups have explored the therapeutic potential of TAK1 targeted therapies. One group has shown that the selective TAK1 inhibitor, Takinib developed at Duke University attenuated rheumatoid arthritis like pathology in the CIA mouse model of human inflammatory arthritis. Furthermore, pharmacological inhibition of TAK1 has shown to reduce inflammatory cytokines in particular TNF.

**Immunogen:** Synthetic peptide within C-terminal human TAK1.

**Positive control:** A431 cell lysate, A549 cell lysate, NIH/3T3 cell lysate, C6 cell lysate, Mouse lung tissue lysate, Rat lung tissue lysate, HeLa cell lysate, COS-1 cell lysate.

**Subcellular location:** Cytoplasm, Cell membrane.

**Database links:** SwissProt: O43318 Human | Q62073 Mouse | P0C8E4 Rat

**Recommended Dilutions:**

**WB** 1:1,000

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

**Storage Instruction:** Store at +4°C after thawing. Aliquot store at -20°C. Avoid repeated freeze / thaw cycles.

**Purity:** Protein A affinity purified.

Hangzhou Huaan Biotechnology Co., Ltd.

Orders:0086-571-88062880

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## Images

**Fig1:** Western blot analysis of TAK1 on different lysates with Rabbit anti-TAK1 antibody (ET1705-14) at 1/1,000 dilution.

Lane 1: A549-WT cell lysate  
Lane 2: A549-KD TAK1 cell lysate

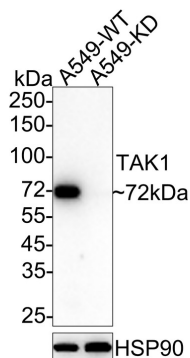
Lysates/proteins at 10 µg/Lane.

Predicted band size: 67 kDa  
Observed band size: 72 kDa

Exposure time: 3 minutes; ECL: K1801;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDN/TBST for 1 hour at room temperature. The primary antibody (ET1705-14) at 1/1,000 dilution was used in 2% NFDN/TBST at 4°C overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.



**Fig2:** Western blot analysis of TAK1 on different lysates with Rabbit anti-TAK1 antibody (ET1705-14) at 1/1,000 dilution.

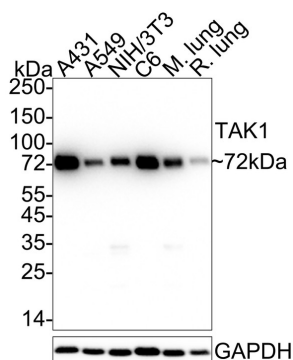
Lane 1: A431 cell lysate (20 µg/Lane)  
Lane 2: A549 cell lysate (20 µg/Lane)  
Lane 3: NIH/3T3 cell lysate (20 µg/Lane)  
Lane 4: C6 cell lysate (20 µg/Lane)  
Lane 5: Mouse lung tissue lysate (40 µg/Lane)  
Lane 6: Rat lung tissue lysate (40 µg/Lane)

Predicted band size: 67 kDa  
Observed band size: 72 kDa

Exposure time: 10 seconds; ECL: K1801;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDN/TBST for 1 hour at room temperature. The primary antibody (ET1705-14) at 1/1,000 dilution was used in 5% NFDN/TBST at 4°C overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.



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**Fig3:** Western blot analysis of TAK1 on different lysates with Rabbit anti-TAK1 antibody (ET1705-14) at 1/1,000 dilution.

Lane 1: HeLa cell lysate  
Lane 2: COS-1 cell lysate

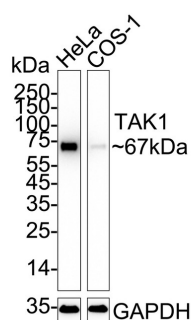
Lysates/proteins at 20 µg/Lane.

Predicted band size: 67 kDa

Observed band size: 67 kDa

Exposure time: 15 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 (ET1705-14) at 1/1,000 dilution was used in 5% NFDM/TBST at 4°C overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

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

### Background References

1. Ma M et al. TAK1 is an essential kinase for STING trafficking. Mol Cell. 2023 Nov
2. Su W et al. TAK1 deficiency promotes liver injury and tumorigenesis via ferroptosis and macrophage cGAS-STING signalling. JHEP Rep. 2023 Feb

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