

# Anti-ATF6 Antibody [PSH06-59]

HA722722



**Product Type:** Recombinant Rabbit monoclonal IgG, primary antibodies

**Species reactivity:** Human, Mouse, Rat

**Applications:** WB, IHC-P, ChIP

**Molecular Wt:** Predicted band size: 75 kDa

**Clone number:** PSH06-59

**Description:** Activating transcription factor 6, also known as ATF6, is a protein that, in humans, is encoded by the ATF6 gene and is involved in the unfolded protein response. ATF6 is an endoplasmic reticulum (ER) stress-regulated transmembrane transcription factor that activates the transcription of ER molecules. Accumulation of misfolded proteins in the Endoplasmic Reticulum results in the proteolytic cleavage of ATF6. The cytosolic portion of ATF6 will move to the nucleus and act as a transcription factor to cause the transcription of ER chaperones.

**Immunogen:** Recombinant protein within human ATF6 aa 1-350.

**Positive control:** HeLa cell lysate, A431 cell lysate, HUVEC cell lysate, 293T cell lysate, HepG2 cell lysate, RAW264.7 cell lysate, PC-12 cell lysate, Mouse pancreas tissue lysate, Mouse kidney tissue lysate, Rat pancreas tissue lysate, Rat kidney tissue lysate, rat pancreas tissue, rat kidney tissue.

**Subcellular location:** Endoplasmic reticulum membrane, Golgi apparatus membrane.

**Database links:** SwissProt: P18850 Human  
Entrez Gene: 226641 Mouse | 304962 Rat

**Recommended Dilutions:**

**WB** 1:1,000

**IHC-P** 1:200-1:1,000

**ChIP** Use 0.5~2 µg for 25 µg of chromatin.

**Storage Buffer:** PBS (pH7.4), 0.1% 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.

**Purity:** Protein A affinity purified.

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Orders:0086-571-88062880

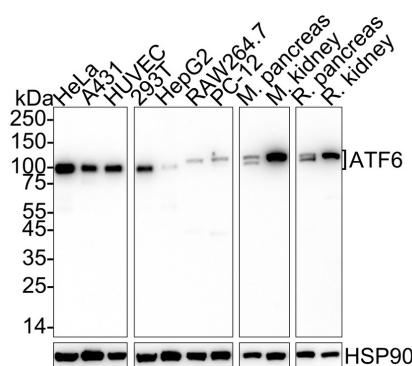
Technical:0086-571-89986345

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## Images

**Fig1:** Western blot analysis of ATF6 on different lysates with Rabbit anti-ATF6 antibody (HA722722) at 1/1,000 dilution.



Lane 1: HeLa cell lysate  
 Lane 2: A431 cell lysate  
 Lane 3: HUVEC cell lysate  
 Lane 4: 293T cell lysate  
 Lane 5: HepG2 cell lysate  
 Lane 6: RAW264.7 cell lysate  
 Lane 7: PC-12 cell lysate  
 Lane 8: Mouse pancreas tissue lysate  
 Lane 9: Mouse kidney tissue lysate  
 Lane 10: Rat pancreas tissue lysate  
 Lane 11: Rat kidney tissue lysate

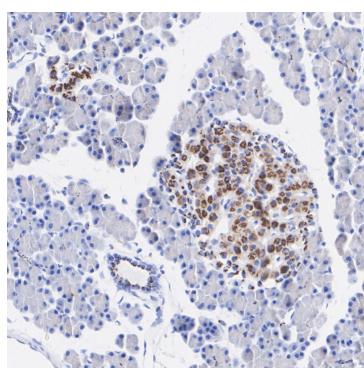
Lysates/proteins at 20 µg/Lane.

Predicted band size: 75 kDa  
 Observed band size: 100-110 kDa

Exposure time: 2 minutes; 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 (HA722722) 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.



**Fig2:** Immunohistochemical analysis of paraffin-embedded rat pancreas tissue with Rabbit anti-ATF6 antibody (HA722722) at 1/1,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 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 (HA722722) 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.

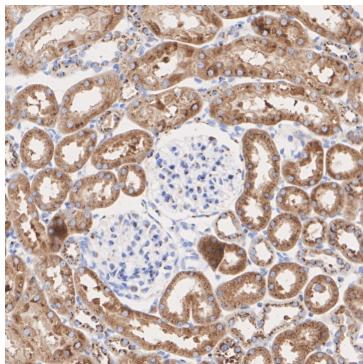
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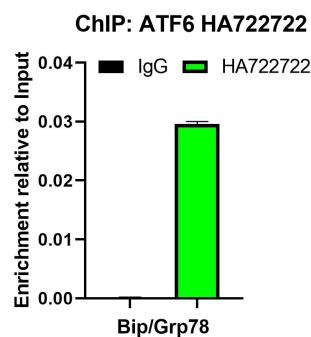
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**Fig3:** Immunohistochemical analysis of paraffin-embedded rat kidney tissue with Rabbit anti-ATF6 antibody (HA722722) at 1/200 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 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 (HA722722) at 1/200 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:** Chromatin immunoprecipitations were performed with cross-linked chromatin from HeLa cells treated with 1 $\mu$ M Thapsigargin for 1 hour with ATF6 (HA722722) or Normal Rabbit IgG according to the ChIP protocol. The enriched DNA was quantified by real-time PCR using indicated primers. The amount of immunoprecipitated DNA in each sample is represented as signal relative to the total amount of input chromatin, which is equivalent to one.

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

#### Background References

1. Ikeda SI et al. Scleral PERK and ATF6 as targets of myopic axial elongation of mouse eyes. *Nat Commun.* 2022 Oct
2. Glembotski CC et al. ATF6 as a Nodal Regulator of Proteostasis in the Heart. *Front Physiol.* 2020 Apr

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