

# Anti-ATF6 Antibody [8D3-R] - BSA and Azide free

## HA610193



**Product Type:** Recombinant Mouse monoclonal IgG1, primary antibodies

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

**Applications:** WB, IF-Cell

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

**Clone number:** 8D3-R

**Description:** Transmembrane glycoprotein of the endoplasmic reticulum that functions as a transcription activator and initiates the unfolded protein response (UPR) during endoplasmic reticulum stress. Cleaved upon ER stress, the N-terminal processed cyclic AMP-dependent transcription factor ATF-6 alpha translocates to the nucleus where it activates transcription of genes involved in the UPR. Binds DNA on the 5'-CCAC[GA]-3' half of the ER stress response element (ERSE) (5'-CCAAT-N9-CCAC[GA]-3') and of ERSE II (5'-ATTGG-N-CCACG-3'). Binding to ERSE requires binding of NF-Y to ERSE. Could also be involved in activation of transcription by the serum response factor. May play a role in foveal development and cone function in the retina.

**Immunogen:** Recombinant protein within Human ATF6 aa 1-670 / 670.

**Positive control:** HeLa cell lysate, Jurkat cell lysate, RAW264.7 cell lysate, PC-12 cell lysate, mouse brain tissue lysate, mouse kidney tissue lysate, HeLa.

**Subcellular location:** Endoplasmic reticulum. Nucleus.

**Database links:** SwissProt: P18850 Human | F6VAN0 Mouse | G3V909 Rat

**Recommended Dilutions:**

WB 1:1,000

IF-Cell 1:100

**Storage Buffer:** PBS (pH7.4).

**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

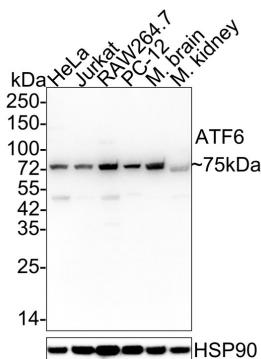
Technical:0086-571-89986345

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## Images

**Fig1:** Western blot analysis of ATF6 on different lysates with Mouse anti-ATF6 antibody (HA610193) at 1/1,000 dilution.



Lane 1: HeLa cell lysate (20 µg/Lane)  
 Lane 2: Jurkat cell lysate (20 µg/Lane)  
 Lane 3: RAW264.7 cell lysate (20 µg/Lane)  
 Lane 4: PC-12 cell lysate (20 µg/Lane)  
 Lane 5: Mouse brain tissue lysate (40 µg/Lane)  
 Lane 6: Mouse kidney tissue lysate (40 µg/Lane)

Predicted band size: 75 kDa

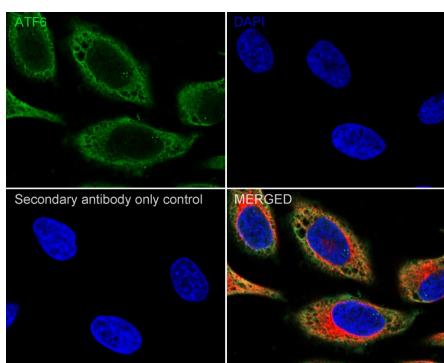
Observed band size: 75 kDa

Exposure time: 1 minute 21 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 (HA610193) at 1/1,000 dilution was used in 5% NFDM/TBST at 4°C overnight. Goat Anti-Mouse IgG - HRP Secondary Antibody (HA1006) at 1/50,000 dilution was used for 1 hour at room temperature.

**Fig2:** Immunocytochemistry analysis of HeLa cells labeling ATF6 with Mouse anti-ATF6 antibody (HA610193) at 1/100 dilution.



Cells were fixed in 4% paraformaldehyde for 20 minutes at room temperature, permeabilized with 0.1% Triton X-100 in PBS for 5 minutes at room temperature, then blocked with 1% BSA in 10% negative goat serum for 1 hour at room temperature. Cells were then incubated with Mouse anti-ATF6 antibody (HA610193) at 1/100 dilution in 1% BSA in PBST overnight at 4 °C. Goat Anti-Mouse IgG H&L (iFluor™ 488, HA1125) was used as the secondary antibody at 1/1,000 dilution. PBS instead of the primary antibody was used as the secondary antibody only control. Nuclear DNA was labelled in blue with DAPI.

beta Tubulin (ET1602-4, red) was stained at 1/100 dilution overnight at +4°C. Goat Anti-Rabbit IgG H&L (iFluor™ 594, HA1122) were used as the secondary antibody at 1/1,000 dilution.

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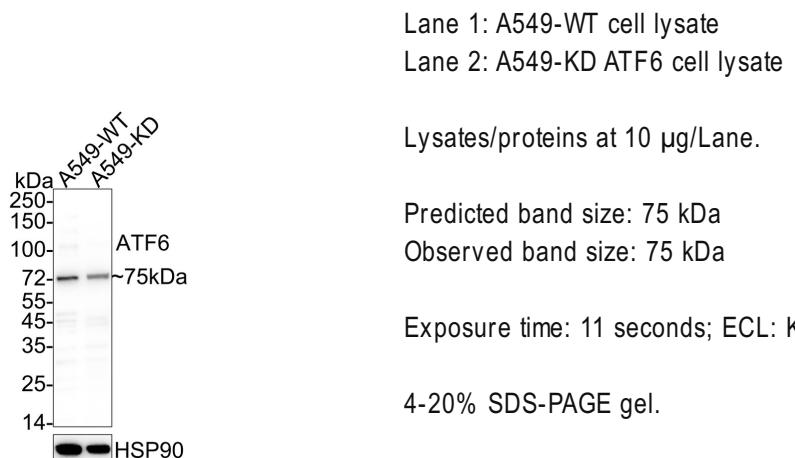
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**Fig3:** Western blot analysis of ATF6 on different lysates with Mouse anti-ATF6 antibody (HA610193) at 1/2,000 dilution.



Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (HA610193) at 1/2,000 dilution was used in 5% NFDM/TBST at 4°C overnight. Goat Anti-Mouse IgG - HRP Secondary Antibody (HA1006) 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. Kohl S et al. Mutations in the unfolded protein response regulator ATF6 cause the cone dysfunction disorder achromatopsia. *Nat Genet* 47:757-765 (2015).
2. Lynch J M et al. A thrombospondin-dependent pathway for a protective ER stress response. *Cell* 149:1257-1268 (2012).

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