Anti-ATF3 Antibody [PSH17-99]

HA723964

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human, Mouse
Applications:	WB
Molecular Wt:	Predicted band size: 21 kDa
Clone number:	PSH17-99

Description: Cyclic AMP-dependent transcription factor ATF-3 is a protein that, in humans, is encoded by the ATF3 gene. ATF-3 is induced upon physiological stress in various tissues. It is also a marker of regeneration following injury of dorsal root ganglion neurons, as injured regenerating neurons activate this transcription factor. Functional validation studies have shown that ATF3 can promote regeneration of peripheral neurons, but is not capable of promoting regeneration of central nervous system neurons.

Immunogen: Recombinant protein within human ATF3 aa 1-100.

Positive control: HEK-293 cell lysate, THP-1 treated with 80nM TPA for 24 hours then treated with 1μg/mL LPS for 15 minutes cell lysate, RAW264.7 treated with 1μg/mL LPS for 24 hours cell lysate.

Subcellular location: Nucleus.

Database links: SwissProt: P18847 Human | Q60765 Mouse

Recommended Dilutions:

WB	1:5,000

Storage Buffer: 1*PBS (pH7.4), 0.1% BSA, 40% Glycerol, 0.2% Proclean 950.

Storage Instruction: Shipped at 4℃. Store at +4℃ short term (1-2 weeks). Store at -20℃ long term.

Purity: Protein A affinity purified.

Images

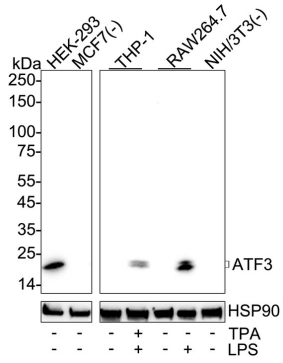


Fig1: Western blot analysis of ATF3 on different lysates with Rabbit anti-ATF3 antibody (HA723964) at 1/5,000 dilution.

Lane 1: HEK-293 cell lysate
Lane 2: MCF7 cell lysate (negative)
Lane 3: THP-1 cell lysate
Lane 4: THP-1 treated with 80nM TPA for 24 hours then treated with 1μg/mL LPS for 15 minutes cell lysate
Lane 5: RAW264.7 cell lysate
Lane 6: RAW264.7 treated with 1μg/mL LPS for 24 hours cell lysate
Lane 7: NIH/3T3 cell lysate (negative)

Lysates/proteins at 30 μg/Lane.

Predicted band size: 21 kDa
Observed band size: 21/19 kDa

Exposure time: 3 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 (HA723964) at 1/5,000 dilution was used in primary antibody dilution (K1803) at 4℃ 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. Hu S et al. Atf3-mediated metabolic reprogramming in hepatic macrophage orchestrates metabolic dysfunction-associated steatohepatitis. Sci Adv. 2024 Jul
2. Huo S et al. ATF3/SPI1/SLC31A1 Signaling Promotes Cuproptosis Induced by Advanced Glycosylation End Products in Diabetic Myocardial Injury. Int J Mol Sci. 2023 Jan