

ATF 4

Cat.No. 318 003; Polyclonal rabbit antibody, 50 µg specific antibody (lyophilized)

Data Sheet

Reconstitution/ Storage	50 µg specific antibody, lyophilized. Affinity purified with the immunogen. Rabbit serum albumin was added for stabilization. For reconstitution add 50 µl H ₂ O to get a 1mg/ml solution in PBS. Then aliquot and store at -20°C until use.
Applications	WB: 1 : 1000 (AP staining) IP: not tested yet ICC: not tested yet IHC: not tested yet IHC-P/FFPE: not recommended
Immunogen	Recombinant protein corresponding to AA 1 to 349 from mouse ATF4 (UniProt Id: Q06507)
Reactivity	Reacts with: rat (Q9ES19), mouse (Q06507). Other species not tested yet.
Specificity	Specific for ATF 4.

TO BE USED IN VITRO / FOR RESEARCH ONLY
NOT TOXIC, NOT HAZARDOUS, NOT INFECTIOUS, NOT CONTAGIOUS

ATF 4, also referred to as **CREB-2**, is a member of the ATF family of basic leucine zipper transcription factors. These proteins are involved in stress response, development, learning, memory and more. While ATF 4 mRNA is quite ubiquitously expressed, protein levels differ between tissue and cell types suggesting a post-transcriptional regulation. It has been shown that both regulation of ATF 4 mRNA translation and stability of the protein influence the total ATF 4 protein level.

Selected General References

- Control of activating transcription factor 4 (ATF4) persistence by multisite phosphorylation impacts cell cycle progression and neurogenesis.
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- Stress-induced gene expression requires programmed recovery from translational repression.
Novoa I, Zhang Y, Zeng H, Jungreis R, Harding HP, Ron D
The EMBO journal (2003) 22(5): 1180-7.
- ATF4 degradation relies on a phosphorylation-dependent interaction with the SCF(betaTrCP) ubiquitin ligase.
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