

ATF3 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP16577b

Product Information

Application	WB, FC, E
Primary Accession	P18847
Other Accession	P29596 , Q60765 , Q2KII1 , NP_001025458.1 , NP_001665.1
Reactivity	Human
Predicted	Bovine, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB30340
Calculated MW	20576
Antigen Region	140-168

Additional Information

Gene ID	467
Other Names	Cyclic AMP-dependent transcription factor ATF-3, cAMP-dependent transcription factor ATF-3, Activating transcription factor 3, ATF3
Target/Specificity	This ATF3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 140-168 amino acids from the C-terminal region of human ATF3.
Dilution	WB~~1:1000 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	ATF3 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	ATF3 {ECO:0000303 PubMed:7515060, ECO:0000312 HGNC:HGNC:785}
Function	This protein binds the cAMP response element (CRE) (consensus: 5'-GTGACGT[AC][AG]-3'), a sequence present in many viral and cellular

promoters. Represses transcription from promoters with ATF sites. It may repress transcription by stabilizing the binding of inhibitory cofactors at the promoter.

Cellular Location

Nucleus {ECO:0000255 | PROSITE-ProRule:PRU00978, ECO:0000269 | PubMed:12034827}

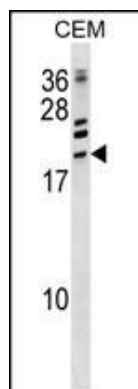
Background

Activating transcription factor 3 is a member of the mammalian activation transcription factor/cAMP responsive element-binding (CREB) protein family of transcription factors. Multiple transcript variants encoding two different isoforms have been found for this gene. The longer isoform represses rather than activates transcription from promoters with ATF binding elements. The shorter isoform (deltaZip2) lacks the leucine zipper protein-dimerization motif and does not bind to DNA, and it stimulates transcription presumably by sequestering inhibitory co-factors away from the promoter. It is possible that alternative splicing of the ATF3 gene may be physiologically important in the regulation of target genes.

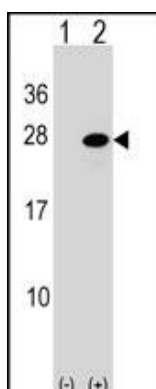
References

Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)
Lee, S.H., et al. Oncogene 29(37):5182-5192(2010)
Park, H.J., et al. Biochem. Biophys. Res. Commun. 400(1):72-77(2010)
Wu, X., et al. Nature 465(7296):368-372(2010)
Koh, I.U., et al. FEBS J. 277(10):2304-2317(2010)

Images

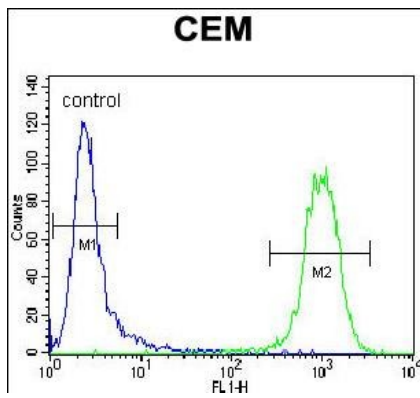


ATF3 Antibody (C-term) (Cat. #AP16577b) western blot analysis in CEM cell line lysates (35ug/lane). This demonstrates the ATF3 antibody detected the ATF3 protein (arrow).



Western blot analysis of ATF3 (arrow) using rabbit polyclonal ATF3 Antibody (C-term) (Cat. #AP16577b). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the ATF3 gene.

ATF3 Antibody (C-term) (Cat. #AP16577b) flow cytometric analysis of CEM cells (right histogram) compared to a negative control cell (left histogram). FITC-conjugated



goat-anti-rabbit secondary antibodies were used for the analysis.

Citations

- [Ectopic expression of human MutS homologue 2 on renal carcinoma cells is induced by oxidative stress with interleukin-18 promotion via p38 mitogen-activated protein kinase \(MAPK\) and c-Jun N-terminal kinase \(JNK\) signaling pathways.](#)

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.