

## ATF3 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP16577b

# **Specification**

## ATF3 Antibody (C-term) - Product Information

Application WB, FC,E Primary Accession P18847

Other Accession <u>P29596</u>, <u>Q60765</u>, <u>Q2KII1</u>, <u>NP 001025458.1</u>,

NP\_001665.1

Reactivity Human

Predicted Bovine, Mouse, Rat

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Antigen Region 140-168

# ATF3 Antibody (C-term) - 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

#### **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.

#### ATF3 Antibody (C-term) - 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**

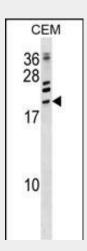
Nucleus {ECO:0000255|PROSITE-ProRule:PRU00978, ECO:0000269|PubMed:12034827}

# ATF3 Antibody (C-term) - Protocols

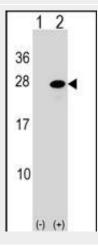
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

## ATF3 Antibody (C-term) - Images

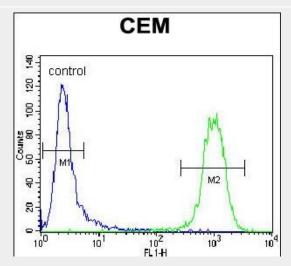


ATF3 Antibody (C-term) (Cat. #AP16577b) western blot analysis in CEM cell line lysates (35ug/lane). This demonstrates the ATF3 antibody detected the ATF3 protein (arrow).





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.

## ATF3 Antibody (C-term) - 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.

### ATF3 Antibody (C-term) - 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) ATF3 Antibody (C-term) - 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-lun N-terminal kinase (INK) signaling pathways.