

## Product datasheet for **AP21087PU-N**

### ATF1 Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	<b>Western blot:</b> 1/500 - 1/1000. <b>Immunohistochemistry on paraffin sections</b> 1/50 - 1/200.
Reactivity:	Human, Mouse
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Synthetic peptide, corresponding to amino acids 20-70 of Human ATF1.
Specificity:	This antibody detects endogenous levels of ATF-1 protein. (region surrounding Ile57)
Formulation:	Phosphate buffered saline (PBS), pH 7.2. State: Aff - Purified State: Liquid purified Ig fraction Preservative: 0.05% sodium azide
Concentration:	1.0 mg/ml
Purification:	Affinity chromatography (> 95% (by SDS-PAGE)
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	~ 29 kDa
Gene Name:	activating transcription factor 1
Database Link:	<a href="#">Entrez Gene 11908 Mouse</a> <a href="#">Entrez Gene 466 Human</a> <a href="#">P18846</a>



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**Background:**

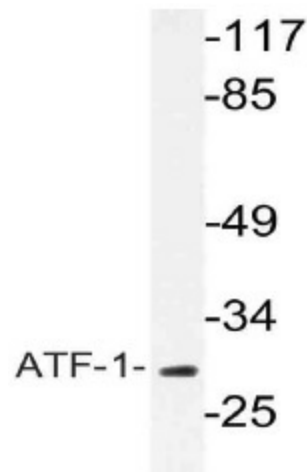
Eukaryotic gene transcription is regulated by sequencespecific transcription factors that bind modular cis acting promoter and enhancer elements. The ATF/ CREB transcription factor family binds the palindromic cAMP response element (CRE) octanucleotide TGACGTCA. The ATF/CREB family includes CREB-1, CREB-2 (also designated ATF-4), ATF-1, ATF-2 and ATF-3. This family of proteins contain highly divergent N-terminal domains, but share a C-terminal leucine zipper for dimerization and DNA binding. ATF-1 is shown to play a key role in the induction of NOX1, this protein binds the cAMP response element (CRE) and mediates PKAinduced stimulation of CRE-reporter genes. ATF-2 forms homodimers and heterodimers with c-Jun to initiate CREdependent transcription. Phosphorylation of ATF-2 at Thr 69 and Thr 71 by stress-activated kinases is necessary for transcriptional activation. Myc also induces phosphorylation of ATF-2 at Thr 69 and Thr 71 to prolong the half-life of ATF-2. ATF-2 functions as a histone acetyltransferase (HAT) and acetylates Histones H2B and H4 specifically in vitro.

**Synonyms:**

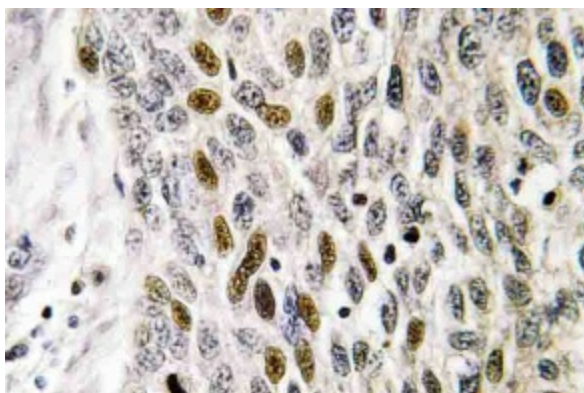
ATF-1, Activating transcription factor 1, Protein TREB36

**Protein Families:**

Druggable Genome, Transcription Factors

**Product images:**

Western blot (WB) analysis of ATF-1 antibody in extracts from COLO cells.



Immunohistochemistry (IHC) analyzes of ATF-1 antibody in paraffin-embedded human lung carcinoma tissue.