

# Product datasheet

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ARG40870 anti-ATF1 antibody

Package: 100 μl Store at: -20°C

# **Summary**

Product Description Rabbit Polyclonal antibody recognizes ATF1

Tested Reactivity Hu

Tested Application ICC/IF, IP, WB

Host Rabbit

Clonality Polyclonal

Isotype IgG

Target Name ATF1

Species Human

Immunogen Synthetic peptide derived from Human ATF1.

Conjugation Un-conjugated

Alternate Names Cyclic AMP-dependent transcription factor ATF-1; TREB36; Activating transcription factor 1; EWS-ATF1;

cAMP-dependent transcription factor ATF-1; Protein TREB36; FUS/ATF-1

# **Application Instructions**

Application table	Application	Dilution
	ICC/IF	1:50 - 1:200
	IP	1:50
	WB	1:1000 - 1:2000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

# **Properties**

Form Liquid

Purification Affinity purified.

Buffer PBS (pH 7.4), 150 mM NaCl, 0.02% Sodium azide and 50% Glycerol.

Preservative 0.02% Sodium azide

Stabilizer 50% Glycerol

Storage instruction For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note For laboratory research only, not for drug, diagnostic or other use.

#### Bioinformation

Gene Symbol

ATF1

Gene Full Name

activating transcription factor 1

Background

This gene encodes an activating transcription factor, which belongs to the ATF subfamily and bZIP (basic-region leucine zipper) family. It influences cellular physiologic processes by regulating the expression of downstream target genes, which are related to growth, survival, and other cellular activities. This protein is phosphorylated at serine 63 in its kinase-inducible domain by serine/threonine kinases, cAMP-dependent protein kinase A, calmodulin-dependent protein kinase I/II, mitogen- and stress-activated protein kinase and cyclin-dependent kinase 3 (cdk-3). Its phosphorylation enhances its transactivation and transcriptional activities, and enhances cell transformation. Fusion of this gene and FUS on chromosome 16 or EWSR1 on chromosome 22 induced by translocation generates chimeric proteins in angiomatoid fibrous histiocytoma and clear cell sarcoma. This gene has a pseudogene on chromosome 6. [provided by RefSeq, Aug 2010]

**Function** 

This protein binds the cAMP response element (CRE) (consensus: 5'-GTGACGT[AC][AG]-3'), a sequence present in many viral and cellular promoters. Binds to the Tax-responsive element (TRE) of HTLV-I. Mediates PKA-induced stimulation of CRE-reporter genes. Represses the expression of FTH1 and other antioxidant detoxification genes. Triggers cell proliferation and transformation. [UniProt]

Calculated Mw

29 kDa

PTM

Phosphorylated at Ser-198 by HIPK2 in response to genotoxic stress. This phosphorylation promotes transcription repression of FTH1 and other antioxidant detoxification genes. The CDK3-mediated phosphorylation at Ser-63 promotes its transactivation and transcriptional activities. Phosphorylated at Ser-63 by RPS6KA4 and RPS6KA5 in response to mitogenic or stress stimuli. [UniProt]

**Cellular Localization** 

Nucleus. [UniProt]

### **Images**



### ARG40870 anti-ATF1 antibody WB image

Western blot: HeLa cell lysate stained with ARG40870 anti-ATF1 antibody.

HeLa