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## 32-8346: Recombinant Human Activating Transcription Factor 1/ATF1 (C-6His)

**Gene ID:** 466 **Uniprot ID:** P18846

## **Description**

Source: E. coli. MW :30.3kD.

Recombinant Human Activating Transcription Factor 1 is produced by our E.coli expression system and the target gene encoding Met1-Val271 is expressed with a 6His tag at the C-terminus. Cyclic AMP-dependent transcription factor ATF-1(ATF1) which contains 1 bZIP (basic-leucine zipper) domain and 1 KID (kinase-inducible) domain, belongs to the bZIP family. It influences cellular physiologic processes by regulating the expression of downstream target genes, which are related to growth, survival, and other cellular activities. ATF1 binds the cAMP response element (CRE) (consensus: 5'-GTGACGT[AC][AG]-3'), a sequence present in many viral and cellular promoters. It also binds to the Tax-responsive element (TRE) of HTLV-I. ATF1 mediates PKA-induced stimulation of CRE-reporter genes, represses the expression of FTH1 and other antioxidant detoxification genes, triggers cell proliferation and transformation. ATF1 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 CDK3. Its phosphorylation enhances its transactivation and transcriptional activities, and enhances cell transformation.

## **Product Info**

**Amount :**  $10 \mu g / 50 \mu g$ 

**Content :** Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4.

Lyophilized protein should be stored at -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted

samples are stable at -20°C for 3 months.

Amino Acid: MEDSHKSTTSETAPQPGSAVQGAHISHIAQQVSSLSESEESQDSSDSIGSSQKAHGILARRPSYRKILKDLSSED

 $TRGRKGDGENSGVSAAVTSMSVPTPIYQTSSGQYIAIAPNGALQLASPGTDGVQGLQTLTMTNSGSTQQGTTIL\\ QYAQTSDGQQILVPSNQVVVQTASGDMQTYQIRTTPSATSLPQTVVMTSPVTLTSQTTKTDDPQLKREIRLMK\\$ 

NREAARECRRKKKEYVKCLENRVAVLENONKTLIEELKTLKDLYSNKSVVEHHHHHH

## **Application Note**

Storage condition:

**Endotoxin :** Less than 0.1 ng/ $\tilde{A} \square \hat{A} \mu g$  (1 IEU/ $\tilde{A} \square \hat{A} \mu g$ ) as determined by LAL test.