

Recombinant Human ATF1

Catalog No: CH61

Description	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.
Source	E. coli
Alternative name	Cyclic AMP-dependent transcription factor ATF-1;cAMP-dependent transcription factor ATF-1;Activating transcription factor 1;
Accession No.	P18846
Formulation	Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4.
Quality Control	Purity: Greater than 90% as determined by reducing SDS-PAGE. Endotoxin: Less than 0.1 ng/µg (1 IEU/µg) as determined by LAL test.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature listed below.
Storage	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 Sequence	MEDSHKSTTSETAPQPGSAVQGAHISHIAQQVSSLSESEESQDSSDSIGSSQKAHGILARRPSYRKILK DLSSSEDRGRKGDGENSGVSAAVTSMVPTPIYQTSSGQYIAIAPNGALQLASPGTDGVQGLQTLTMT NSGSTQQGTTLQYAQTSQGQILVPSNQVVVQTASGDMQTYQIRTPSATSLPQTVVMTSPVTLTSQT TKTDDPQLKREIRLMKNREAARECRRKKKEYVKLENRVAVLENQNKTLEELKTLKDLYSNKSVVEHH HHHH
Background	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.

SDS-Page

