
Recombinant Human Activating Transcription Factor 1/ATF1 Protein(C-6His)**Cat.NO.: TP05864**

3th Edition

Synonyms:Cyclic AMP-dependent transcription factor ATF-1;cAMP-dependent transcription factor ATF-1;Activating transcription factor 1;

Description: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.

Form:PBS

Molecular Weight:30.3 kDa

Sequences:Met 1-Val271

Purity:> 95% by HPLC

Concentration:

Endotoxin Level:<1.0 EU per 1 ug of protein (determined by LAL method)

Storage:Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.