

ATF2

CRE-BP1, CREB2, TREB7, HB16

recombinant, *E. coli*

Cat. No.	Amount
PR-877	10 µg

For *in vitro* use only
Quality guaranteed for 12 months
Store at -80°C

Avoid freeze / thaw cycles

Form

Liquid. Supplied in 20 mM Tris-HCl pH 8.0, 100 mM KCl, 0.2 mM EDTA, 1 mM DTT, and 20% glycerol.

Application

Recombinant ATF2 (1-505) can be used for *in vitro* phosphorylation, dephosphorylation assays and inhibitor screening assay.

Purity

> 90% by SDS-PAGE

Description

His-tagged recombinant ATF2 is isolated from an *E. coli* strain and purified by an affinity chromatography in combination with FPLC chromatography.

The activating transcription factor 2 (ATF2), also known as CRE-BP1 (cAMP-responsive element binding protein 1), is a member of the leucine zipper family of DNA binding proteins and binds to both AP-1 and CRE DNA response elements of many viral and cellular promoters. ATF2 can be activated by a diverse number of cellular stresses such as inflammatory cytokines, genotoxic agents and UV irradiation through MAPK pathway. It is activated through phosphorylation at two phosphosites of Thr69 and Thr71 by upstream activators like JNK/p38 (MAPK14, SAPK2A).

Selected References:

- Sano *et al.* (1999) ATF-2 Is a Common Nuclear Target of Smad and TAK1 Pathways in Transforming Growth Factor-beta Signaling. *J Biol Chem* **274**:8949.
- Livingston *et al.* (1995) ATF-2 contains a phosphorylation-dependent transcriptional activation domain. *EMBO J* **14**:1785.
- Abdel-Hafiz *et al.* (1992) Activating transcription factor-2 DNA-binding activity is stimulated by phosphorylation catalyzed by p42 and p54 microtubule-associated protein kinases. *Mol. Endocrinol.* **6**:2079.
- Kim *et al.* (1992) Retinoblastoma gene product activates expression of the human TGF-beta2 gene through transcription factor ATF-2. *Nature* **358**:331.