Eukaryotic gene transcription is regulated by sequence-specific transcription factors which bind modular cis-acting promotor and enhancer elements. The ATF/CREB transcription factor family binds the palindromic cAMP response element (CRE) octanucleotide TGACGTCA. The ATF/CREB family includes CREB-1, CREB-2 (also designated ATF-4), ATF-1, ATF-2 and ATF-3. This family of proteins contain highly divergent N-terminal domains, but share a C-terminal leucine zipper for dimerization and DNA binding. ATF-2 forms homodimers and heterodimers with c-Jun to initiate CRE-dependent transcription. Phosphorylation of ATF-2 at Thr 69 and Thr 71 by stress-activated kinases is necessary for transcriptional activation. Myc also induces phosphorylation of ATF-2 at Thr 69 and Thr 71 to prolong the half-life of ATF-2. ATF-2 also functions as a histone acetyltransferase (HAT) by specifically acetylating histones H2B and H4 in vitro.

**STORAGE**

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**DATA**

![ATF-2 (F2BR-1): sc-242. Western blot analysis of ATF-2 expression in K-562 (A) and Jurkat (B) nuclear extracts and MDA-MB-231 (C), MOLT-4 (D) and HL-60 (E) whole cell lysates.](image)

**APPLICATIONS**

ATF-2 (F2BR-1) is recommended for detection of ATF-2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:1000), immunoprecipitation (1-2 µg per 100-500 µg of total protein (1 ml of cell lysate) and immunofluorescence (starting dilution 1:50, dilution range 1:100-1:500). Suitable for use as control antibody for ATF-2 siRNA (h): sc-29205, ATF-2 siRNA (m): sc-29756, ATF-2 siRNA (r): sc-156017, ATF-2 shRNA Plasmid (h): sc-29205-Sh, ATF-2 shRNA Plasmid (m): sc-29756-Sh, ATF-2 shRNA Plasmid (r): sc-156017-Sh, ATF-2 shRNA (h) Lentiviral Particles: sc-29205-V, ATF-2 shRNA (m) Lentiviral Particles: sc-29756-V and ATF-2 shRNA (r) Lentiviral Particles: sc-156017-V.

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

For research use only, not for use in diagnostic procedures.

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