## **Bioworld Technology CO., Ltd.**



## ATF1 (I57) Peptide

Cat No.: BS3717P

## Background

Eukaryotic gene transcription is regulated by sequence-specific transcription factors that bind modular cis acting promoter 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-1 is shown to play a key role in the induction of NOX1, this protein binds the cAMP response element (CRE) and mediates PKA-induced stimulation of CRE-reporter genes. ATF-2 forms homodimers and heterodimers with c-Jun to initiate CREdependent 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 functions as a histone acetyltransferase (HAT) and acetylates Histones H2B and H4 specifically in vitro.

Swiss-Prot

P18846

## Applications

Blocking

Specificity

This peptide can be used with studies using BS3717 ATF1 (I57) pAb.

**Purification & Purity** 

Synthetic peptide ATF1 (I57). (Note: the amino acid sequence is proprietary). The purity is > 98%.

Product

1 mg/ml in DI water.

Storage & Stability

Store at 4  ${}^\circ\!\!{\rm C}$  short term. Aliquot and store at -20  ${}^\circ\!\!{\rm C}$  long term. Avoid freeze-thaw cycles.

**Research Use** 

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