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Certificate of Analysis and Data Sheet

Recombinant Human Activating Transcription Factor-2

Catalog No.
228-10077

Source:
Escherichia Coli

Synonyms

Cyclic AMP-dependent transcription factor ATF-2, Activating transcription factor 2, cAMP response element-binding protein CRE-BP1, HB16, CREB2, TREB7, MGC111558, ATF2.

Introduction

This gene encodes a transcription factor that is a member of the leucine zipper family of DNA binding proteins. This protein binds to the cAMP-responsive element (CRE), an octameric palindrome. The protein forms a homodimer or heterodimer with c-Jun and stimulates CRE-dependent transcription. The protein is also a histone acetyltransferase (HAT) that specifically acetylates histones H2B and H4 *in vitro*; thus it may represent a class of sequence-specific factors that activate transcription by direct effects on chromatin components. Additional transcript variants have been identified but their biological validity has not been determined.

Description

Activating Transcription Factor-2 Human Recombinant produced in E.Coli is a non-glycosylated, polypeptide chain encoding 19-96 amino acids and having a molecular mass of 57 kDa. The ATF-2 is manufactured as a maltose binding protein (MBP) fusion protein with an amino terminal polyhistidine tag. ATF-2 is purified by proprietary chromatographic techniques.

Formulation

ATF-2 is supplied as lyophilized freeze dry powder without additives.

Unit Definition

ATF2 is phosphorylatable *in vitro*, using either recombinant active JNK1 or JNK2, or with immunoprecipitated JNK from stimulated cells. This phosphorylation can be monitored by Western blot analysis using phosphorylation site specific antibody directed to ATF2 [pT71], in conjunction with chemiluminescence detection methods. Optimization of the cell stimulation protocol, cell lysis procedure, and reaction conditions may be required for each specific application.

Note

Kinase activity may vary depending on the substrate and reaction conditions.

Storage Conditions

Store at 4°C if entire vial will be used within 1-2 weeks. Store, frozen at -20°C for longer periods of time. Avoid multiple freeze-thaw cycles.

**The products are furnished for LABORATORY RESEARCH USE ONLY.
Not for diagnostic or therapeutic use.**