Human ATF2 Protein (His & GST Tag)

Catalog Number: **11599-H20B**

General Information

Gene Name Synonym:

CRE-BP1; CREB-2; CREB2; HB16; TREB7

Protein Construction:

A DNA sequence encoding full length of human ATF2 (P15336-1) (Met 1-Ser 505) was fused with the N-terminal polyhistidine-tagged GST tag at the N-terminus.

Source: Human

Expression Host: Baculovirus-Insect Cells

QC Testing

Purity: > 80 % as determined by SDS-PAGE

Endotoxin:

< 1.0 EU per μg of the protein as determined by the LAL method

Stability:

Samples are stable for up to twelve months from date of receipt at -70 ℃

Predicted N terminal: Met

Molecular Mass:

The recombinant human ATF2/GST chimera consists of 742 amino acids and has a calculated molecular mass of 82.4 kDa. It migrates as an approximately 85 kDa band in SDS-PAGE under reducing conditions.

Formulation:

Lyophilized from sterile 20mM Tris, 500mM NaCl, pH 8.0, 10% gly

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Storage:

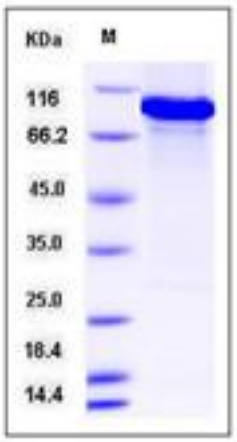
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

Activating transcription factor 2, also known as ATF2, is a member of the leucine zipper family of DNA-binding proteins that binds to the cAMP response element. Its activity is enhanced after phosphorylation by stress-activated protein kinases such as c-Jun N-terminal kinase and p38. ATF2 has been found to be a target of the JNK signal transduction pathway and mediate adenovirus E1A-inducible transcriptional activation. ATF2 is also been reported playing roles in TGF-β signaling pathway. It has been shown that the transcription factor ATF2 is bound by a hetero-oligomer of Smad3 and Smad4 upon TGF-β stimulation. Studies indicate that ATF-2 plays a central role in TGF-β signaling by acting as a common nuclear target of both Smad and TAK1 pathways.

References

1.Livingstone C, *et al*. (1995) ATF-2 contains a phosphorylation-dependent transcriptional activation domain. EMBO J. 14 (8): 1785-97. 2.Gupta S, *et al*. (1995) Transcription factor ATF2 regulation by the JNK signal transduction pathway. Science . 267 (5196): 389-93. 3.Sano YJ, *et al*. (1999) ATF-2 Is a Common Nuclear Target of Smad and TAK1 Pathways in Transforming Growth Factor-_ Signaling. The Journal of Biological Chemistry. 274: 8949-57.