

Full-Length

# ATF4 (Human) Recombinant Protein (P01)

Catalog # H00000468-P01

Size 25 ug, 10 ug

## Applications



## Specification

### Product Description

Human ATF4 full-length ORF ( AAH08090, 1 a.a. - 351 a.a.) recombinant protein with GST-tag at N-terminal.

### Sequence

MTEMSFLSSEVLVGDLMSPFDPSGLGAEESLGLDDYLEVAKHFKPHGFSSDKAKAGSSEWLA  
VDGLVSPSNNKEDAFSGTDWMLEKMDLKEFDLDALLGIDDLETMPDDLTTLDDTCDLFAPLV  
QETNKQPPQTVNPIGHLPESLTKPDQVAPFTFLQPPPLSPGVLSSTPDHSFSLELGSEVDITEGD  
RKPDTAYVAMIPQCIKEEDTPSDNDSGICMSPESYLGSPQHSPSTRGSPNRSPLSPGVLCGSAR  
PKPYDPPGEKMVAACKVKGEKLDKLLKKMEQNKTAATRYRQKKRAEQEALTGECKELEKKNEAL  
KERADSLAKEIQYLKDLIEEVRKARGKKRVP

### Host

Wheat Germ (in vitro)

### Theoretical MW (kDa)

64.35

### Preparation Method

[in vitro wheat germ expression system](#)

### Purification

Glutathione Sepharose 4 Fast Flow

### Quality Control Testing

12.5% SDS-PAGE Stained with Coomassie Blue.

### Storage Buffer

50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.

### Storage Instruction

Store at -80°C. Aliquot to avoid repeated freezing and thawing.

## Note

Best use within three months from the date of receipt of this protein.

## Applications

- Enzyme-linked Immunoabsorbent Assay
- Western Blot (Recombinant protein)
- Antibody Production
- Protein Array

## Gene Info — ATF4

Entrez GeneID [468](#)

GeneBank Accession# [BC008090](#)

Protein Accession# [AAH08090](#)

Gene Name ATF4

Gene Alias CREB-2, CREB2, TAXREB67, TXREB

Gene Description activating transcription factor 4 (tax-responsive enhancer element B67)

Omim ID [604064](#)

Gene Ontology [Hyperlink](#)

**Gene Summary**

This gene encodes a transcription factor that was originally identified as a widely expressed mammalian DNA binding protein that could bind a tax-responsive enhancer element in the LTR of HTLV-1. The encoded protein was also isolated and characterized as the cAMP-response element binding protein 2 (CREB-2). The protein encoded by this gene belongs to a family of DNA-binding proteins that includes the AP-1 family of transcription factors, cAMP-response element binding proteins (CREBs) and CREB-like proteins. These transcription factors share a leucine zipper region that is involved in protein-protein interactions, located C-terminal to a stretch of basic amino acids that functions as a DNA binding domain. Two alternative transcripts encoding the same protein have been described. Two pseudogenes are located on the X chromosome at q28 in a region containing a large inverted duplication. [provided by RefSeq]

**Other Designations** activating transcription factor 4|cAMP response element-binding protein 2

## Publication Reference

- [Injury-induced platelet-derived growth factor receptor-alpha expression mediated by interleukin-1beta \(IL-1beta\) release and cooperative transactivation by NF-kappaB and ATF-4: IL-1beta facilitates HDAC-1/2 dissociation from promoter.](#)

Zhang N, Khachigian LM.

The Journal of Biological Chemistry 2009 Oct; 284(41):27933.

Application: Func, Probe

## Pathway

- [GnRH signaling pathway](#)
- [Long-term potentiation](#)
- [MAPK signaling pathway](#)
- [Neurotrophin signaling pathway](#)
- [Prostate cancer](#)

## Disease

- [Bipolar Disorder](#)
- [Genetic Predisposition to Disease](#)
- [Mental Disorders](#)
- [Neuropsychological Tests](#)
- [Schizophrenia](#)