

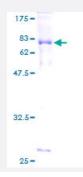
Full-Length

ATF4 (Human) Recombinant Protein (P01)

Catalog # H00000468-P01 Siz

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-t erminal.
Sequence	MTEMSFLSSEVLVGDLMSPFDPSGLGAEESLGLLDDYLEVAKHFKPHGFSSDKAKAGSSEWLA VDGLVSPSNNSKEDAFSGTDWMLEKMDLKEFDLDALLGIDDLETMPDDLLTTLDDTCDLFAPLV QETNKQPPQTVNPIGHLPESLTKPDQVAPFTFLQPPPLSPGVLSSTPDHSFSLELGSEVDITEGD RKPDYTAYVAMIPQCIKEEDTPSDNDSGICMSPESYLGSPQHSPSTRGSPNRSLPSPGVLCGSAR PKPYDPPGEKMVAAKVKGEKLDKKLKKMEQNKTAATRYRQKKRAEQEALTGECKELEKKNEAL 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-HCI, 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 GenelD	<u>468</u>
GeneBank Accession#	<u>BC008090</u>
Protein Accession#	<u>AAH08090</u>
Gene Name	ATF4
Gene Alias	CREB-2, CREB2, TAXREB67, TXREB
Gene Description	activating transcription factor 4 (tax-responsive enhancer element B67)
Omim ID	<u>604064</u>
Gene Ontology	Hyperlink
Gene Summary	This gene encodes a transcription factor that was originally identified as a widely expressed mam malian DNA binding protein that could bind a tax-responsive enhancer element in the LTR of HTL V-1. The encoded protein was also isolated and characterized as the cAMP-response element bi nding 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 pr oteins (CREBs) and CREB-like proteins. These transcription factors share a leucine zipper regio n that is involved in protein-protein interactions, located C-terminal to a stretch of basic amino aci ds that functions as a DNA binding domain. Two alternative transcripts encoding the same protein have been described. Two pseudogenes are located on the X chromsome at q28 in a region cont aining 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
- <u>Neurotrophin signaling pathway</u>
- Prostate cancer

Disease

- Bipolar Disorder
- Genetic Predisposition to Disease
- Mental Disorders
- <u>Neuropsychological Tests</u>
- Schizophrenia