# Activating Transcription Factor 1 (ATF-1) ELISA Kit for Human

## PRODUCT OVERVIEW

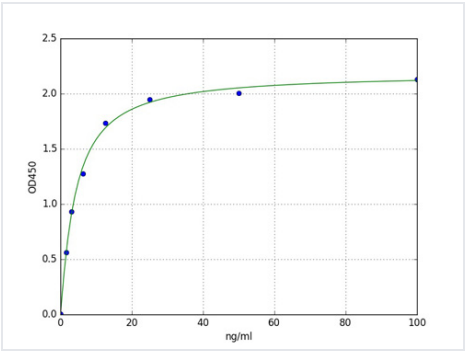
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| **Product Name** | Activating Transcription Factor 1 (ATF-1), ELISA Kit |
| **Full Product Name** | Human Activating Transcription Factor 1 ELISA Kit |
| **Product Gene Name** | ATF-1 elisa kit |
| **Product Synonym Names** | ATF-1 |
| **Species Reactivity** | Human |
| **Assay Type** | Sandwich ELISA, Double Antibody |
| **Samples** | Serum, Plasma, Cell Culture Supernatant, cell or tissue lysate, Other liquid samples |
| **Detection Range** | 1.563-100ng/ml |
| **Sensitivity** | 0.938ng/ml |
| **Preparation and Storage** | Store entire kit at 2-8C for short-term. For longer-term, please store the microplate & standard at -20C, while the remaining reagents can be stored at 2-8C |
| **Molecular Weight** | 15,295 Da |
| **OMIM** | 123803 |
| **ISO Certification** | Manufactured in an ISO 13485:2003 and EN ISO 13485:2012 Certified Laboratory. |
| **Related Product Information for ATF-1 elisa kit** | Principle of the Assay\|\|This kit was based on sandwich enzyme-linked immune-sorbent assay technology. anti-Human ATF-1 antibody was pre-coated onto 96-well plates. And the biotin conjugated anti-Human ATF-1 antibody was used as detection antibodies. The standards, test samples and biotin conjugated detection antibody were added to the wells subsequently, and wash with wash buffer. HRP-Streptavidin was added and unbound conjugates were washed away with wash buffer. TMB substrates were used to visualize HRP enzymatic reaction. TMB was catalyzed by HRP to produce a blue color product that changed into yellow after adding acidic stop solution. The density of yellow is proportional to the Human ATF-1 amount of sample captured in plate. Read the O.D. absorbance at 450nm in a microplate reader, and then the concentration of Human ATF-1 can be calculated. |
| **Other Notes** | Small volumes of ATF-1 elisa kit vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply. |
| **Searchable Terms for ATF-1 purchase** | MBS761219 is a ready-to-use microwell, strip plate ELISA (enzyme-linked immunosorbent assay) Kit for analyzing the presence of the Activating Transcription Factor 1 (ATF-1) ELISA Kit target analytes in biological samples. The concentration gradients of the kit standards or positive controls render a theoretical kit detection range in biological research samples containing ATF-1. The ELISA analytical biochemical technique of the MBS761219 kit is based on ATF-1 antibody-ATF-1 antigen interactions (immunosorbency) and an HRP colorimetric detection system to detect ATF-1 antigen targets in samples. The ELISA Kit is designed to detect native, not recombinant, ATF-1. Appropriate sample types may include undiluted body fluids and/or tissue homogenates, secretions. Quality control assays assessing reproducibility identified the intra-assay CV (%) and inter-assay CV(%). |

**Typical Data & Standard Curve**

Results of a typical standard run of a Human ATF-1 ELISA Kit are shown below. This standard curve was generated at our lab for demonstration purpose only. Each user should obtain their own standard curve as per experiment. (N/A=not applicable)

| X | ng/ml | 0 | 1.563 | 3.125 | 6.25 | 12.5 | 25 | 50 | 100 |
|---|---|---|---|---|---|---|---|---|---|
| Y | OD450 | 0.004 | 0.582 | 0.843 | 1.367 | 1.666 | 1.852 | 1.943 | 2.375 |

**Typical Testing Data of ATF-1 elisa kit**




**Typical Standard Curve of ATF-1 elisa kit**

## ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for ATF-1. It may not necessarily be applicable to this product.

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| **NCBI GI #** | 119578555 |
| **NCBI GeneID** | 466 |
| **NCBI Accession #** | EAW58151.1 |
| **UniProt Secondary Accession #** | P25168; Q9H4A8; B4DRF9 |
| **UniProt Related Accession #** | P18846; AAB25878 |
| **NCBI Official Full Name** | activating transcription factor 1 |
| **NCBI Official Synonym Full Names** | activating transcription factor 1 |
| **NCBI Official Symbol** | ATF1 |
| **NCBI Official Synonym Symbols** | TREB36; EWS-ATF1; FUS/ATF-1 |
| **UniProt Protein Name** | Cyclic AMP-dependent transcription factor ATF-1 |
| **UniProt Synonym Protein Names** | Activating transcription factor 1; Protein TREB36 |
| **Protein Family** | Cyclic AMP-dependent transcription factor |
| **UniProt Gene Name** | ATF1 |
| **UniProt Synonym Gene Names** | cAMP-dependent transcription factor ATF-1 |
| **UniProt Entry Name** | ATF1_HUMAN |
| **NCBI Protein Information** | cyclic AMP-dependent transcription factor ATF-1 |
| **NCBI Summary for ATF-1** | This gene encodes an activating transcription factor, which belongs to the ATF subfamily and bZIP (basic-region leucine zipper) family. It influences cellular physiologic processes by regulating the expression of downstream target genes, which are related to growth, survival, and other cellular activities. This protein is phosphorylated at serine 63 in its kinase-inducible domain by serine/threonine kinases, cAMP-dependent protein kinase A, calmodulin-dependent protein kinase I/II, mitogen- and stress-activated protein kinase and cyclin-dependent kinase 3 (cdk-3). Its phosphorylation enhances its transactivation and transcriptional activities, and enhances cell transformation. Fusion of this gene and FUS on chromosome 16 or EWSR1 on chromosome 22 induced by translocation generates chimeric proteins in angiomatoid fibrous histiocytoma and clear cell sarcoma. This gene has a pseudogene on chromosome 6. [provided by RefSeq, Aug 2010] |

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| **UniProt Comments for ATF-1** | ATF-1: a transcription factor that is a member of the leucine zipper family. Forms a homodimer or heterodimer with c-Jun and stimulates CRE-dependent transcription. Binds the Tax-responsive element (TRE) of HTLV-I. Activated downstream of IL-1. c-Src and TRAF6 are mediators of IL-1-induced AP-1 activation. Plays an important role in the trans-activation of the MHC class II trans-activator (CIITA) promoter III in B cells.<br><br>Protein type: Transcription factor<br><br>Chromosomal Location of Human Ortholog: 12q13<br><br>Cellular Component: nucleoplasm; nucleus<br><br>Molecular Function: protein binding; protein complex binding; protein heterodimerization activity; RNA polymerase II transcription factor activity, enhancer binding; transcription factor activity<br><br>Biological Process: cellular protein complex assembly; innate immune response; MyD88-dependent toll-like receptor signaling pathway; MyD88-independent toll-like receptor signaling pathway; nerve growth factor receptor signaling pathway; positive regulation of DNA replication; positive regulation of transcription from RNA polymerase II promoter; response to cobalt ion; response to organic cyclic substance; stress-activated MAPK cascade; toll-like receptor 10 signaling pathway; toll-like receptor 2 signaling pathway; toll-like receptor 3 signaling pathway; toll-like receptor 4 signaling pathway; toll-like receptor 5 signaling pathway; toll-like receptor 9 signaling pathway; toll-like receptor signaling pathway; transcription from RNA polymerase II promoter |
| **Research Articles on ATF-1** | **1.** genetic association studies in a population in China: Data suggest that an SNP in ATF1 (rs11169571) is associated with essential hypertension in the population studied; altered binding of microRNA-1283 appears to be involved. |
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