

# Human Activating transcription factor-1 (ATF-1) ELISA Kit



Catalog No: #EK11768

Orders: order@signalwayantibody.com

Package Size: #EK11768-1 48T #EK11768-2 96T

Support: tech@signalwayantibody.com

## Description

Product Name	Human Activating transcription factor-1 (ATF-1) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Human (Homo sapiens)
Other Names	EWS-ATF1; FUS/ATF-1; TREB36;
Accession No.	P18846
Uniprot	P18846
GeneID	466;
Storage	<p>The stability of ELISA kit is determined by the loss rate of activity. The loss rate of this kit is less than 5% within the expiration date under appropriate storage condition.</p> <p>The loss rate was determined by accelerated thermal degradation test. Keep the kit at 37C for 4 and 7 days, and compare O.D.values of the kit kept at 37C with that of at recommended temperature. (referring from China Biological Products Standard, which was calculated by the Arrhenius equation. For ELISA kit, 4 days storage at 37C can be considered as 6 months at 2 - 8C, which means 7 days at 37C equaling 12 months at 2 - 8C).</p>

## Application Details

Detect Range:0.156-10 ng/mL

Sensitivity:0.066 ng/mL

Sample Type:Serum, Plasma, Other biological fluids

Sample Volume: 1-200 µL

Assay Time:1-4.5h

Detection wavelength:450 nm

## Product Description

**Detection Method:**SandwichTest principle:This assay employs a two-site sandwich ELISA to quantitate ATF-1 in samples. An antibody specific for ATF-1 has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anyATF-1 present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for ATF-1 is added to the wells. After washing, Streptavidin conjugated Horseradish Peroxidase (HRP) is added to the wells. Following a wash to remove any unbound avidin-enzyme reagent, a substrate solution is added to the wells and color develops in proportion to the amount of ATF-1 bound in the initial step. The color development is stopped and the intensity of the color is measured.**Product Overview:**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.Activating Transcription Factor 1 binds the cAMP response element (CRE) (consensus: 5'-GTGACGT[AC][AG]-3'), a sequence present in many viral and cellular promoters. Binds to the Tax-responsive element (TRE) of HTLV-I. Mediates PKA-induced stimulation of CRE-reporter genes. Represses the expression of FTH1 and other antioxidant detoxification genes. Triggers cell proliferation and 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.

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Note: This product is for in vitro research use only