

# Cellular Activation of Signaling ELISA:

## CASE™ Kit for ATF2 T69/T71

<u>Catalog Number</u>	<u>Contents</u>
FE-020	One CASE Kit for 96 cell-based assays

### Description

The CASE™ Kit for ATF2 is designed to analyze ATF2 phosphorylation in cultured mouse cell lines. This cell-based ELISA kit quantifies the amount of activated (phosphorylated) ATF2 protein relative to total ATF2 protein. The phosphorylation sites are threonines 69 and 71. By determining ATF2 protein phosphorylation in your experimental model system, you can verify ATF pathway activation in your cell line and determine the effect of various treatments, inhibitors, or activators on the pathway.

#### **More information on the ATF2 protein from NCBI:**

“This gene encodes a transcription factor that is a member of the leucine zipper family of DNA binding proteins. This protein binds to the cAMP-responsive element (CRE), an octameric palindrome. The protein forms a homodimer or heterodimer with c-Jun and stimulates CRE-dependent transcription. The protein is also a histone acetyltransferase (HAT) that specifically acetylates histones H2B and H4 in vitro; thus it may represent a class of sequence-specific factors that activate transcription by direct effects on chromatin components. Additional transcript variants have been identified but their biological validity has not been determined.”

Reference: [www.ncbi.nlm.nih.gov/entrez/query.fcgi?dopt=GenPept&cmd=Retrieve&db=protein&list\\_uids=22538422](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?dopt=GenPept&cmd=Retrieve&db=protein&list_uids=22538422)

### Materials Included

**Please check the kit components immediately after you receive this package. SuperArray is not responsible for any missing items not reported within two (2) business days upon receipt.**

**Shelf Life:** All reagents are stable at the recommended temperature for 6 months after receipt of the kit.

Enough reagents are provided for 96 assays.

<b>Box 1: Assay and Detection Reagents</b> (Store at 4°C)	<b>Box 2: Primary Antibodies<sup>1</sup></b> (Store at -20°C)	
<u>Components</u>	<u>Components</u>	<u>Dilution Factor</u>
10X Antigen Retrieval Buffer <sup>2</sup>	Anti-Phospho-Protein Specific Antibody	1:100
10X Washing Buffer <sup>2</sup>	Anti-Pan-Protein Specific Antibody	1:100
Antibody Dilution Buffer		
Blocking Buffer, dry powder <sup>3</sup>		
Cell Staining Solution		
Developing Solution		
Secondary Antibody <sup>1</sup> (Dilute 1:16 before use.)		
Stop Solution		
Washing Buffer Reservoir (4)		

<sup>1</sup>Each antibody stock must be freshly diluted by the appropriate factor into Antibody Dilution Buffer on the same day of the experiment. See the CASE™ Kit User Manual for more details.

<sup>2</sup>10X Washing Buffer and 10X Antigen Retrieval Buffer must be diluted to 1X with dH<sub>2</sub>O before use.

<sup>3</sup>Just before use, dissolve powder in 30 ml 1X Washing Buffer by mixing well. Once dissolved, Blocking Buffer may be stored at 4 °C for up to two (2) weeks.

## **Shipping and Storage Conditions**

Box 1 is shipped at either ambient or a refrigerated temperature and should be stored at 4°C.  
Box 2 is shipped on dry ice or cold packs and should be stored at -20°C.

## **Related Products**

Inhibitors for Functional Assays: Inhibitors of pathway activation that serve as a control for specificity.

### **For follow-up at the expression level:**

RT<sup>2</sup> Profiler™ PCR Arrays and Oligo GEArray® Microarrays  
(See [www.superarray.com/ArrayList.php](http://www.superarray.com/ArrayList.php) for complete listings)

RT<sup>2</sup> Real-Time™ PCR Primer Sets – available for every human, mouse, and rat gene  
(See [www.superarray.com/QRTsearch.php](http://www.superarray.com/QRTsearch.php) for our primer set search engine)

### **For knock down of gene expression:**

SureSilencing™ shRNA Plasmids – available for every human, mouse, and rat gene  
(See [www.superarray.com/RNAisearch.php](http://www.superarray.com/RNAisearch.php) for complete listings)