

TECHNICAL DATASHEET ELISA – c-JUN (p-Ser73)

## ELISAONE™ c-JUN (p-Ser73) Assays

ELISAONE™ assay kits for analysis of cellular c-JUN phosphorylation

### ELISAONE™ Overview

ELISAONE assay kits are for the detection of cellular proteins. A whole new way of performing cellular assays, ELISAONE takes the hard work out of running a standard ELISA, while still giving the high quality results expected from a sandwich immunoassay. Fully self-contained kits are supplied in a convenient 96-well format. Simple to use and highly sensitive, ELISAONE kits are designed to get results, fast.

### ELISAONE™ phospho- c-JUN and total c-JUN assays

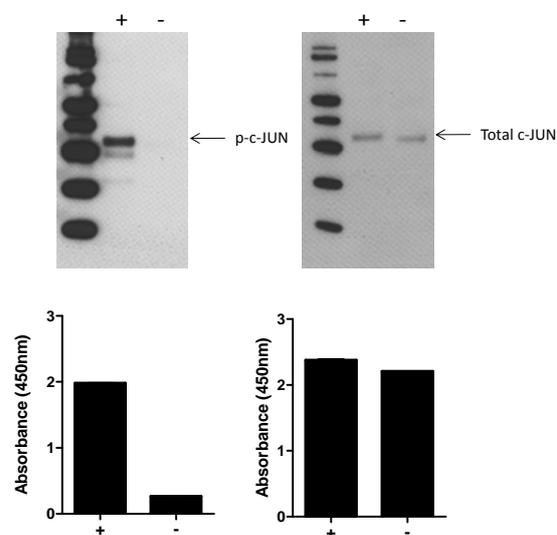
c-JUN is a component of the transcription factor AP-1, which is composed of dimers of members of the Fos and JUN protein families. c-JUN transcriptional activity is regulated by phosphorylation at Ser63 and Ser73. Many factors, including mitogenic and stress-induced signaling pathways, stimulate phosphorylation of c-JUN at Ser63 and Ser73 and activate c-JUN/AP-1-dependent transcription. JNK, whose activity is stimulated by the same signals, binds to the amino-terminal region of c-JUN and phosphorylates it directly. c-JUN/AP-1 dependant transcription is involved in the regulation of genes involved in many diverse and sometimes opposing cellular processes, including proliferation, survival, apoptosis, metastasis and inflammation, depending on the cell type.

### ELISAONE™ c-JUN (p-Ser73) assay technical specifications

#### Specificity:

TGR's ELISAONE c-JUN (p-Ser73) assay kits detect endogenous levels of c-JUN (GenBank Accession NP\_002219) in cellular lysates. Phospho-c-JUN (p-Ser73) assay kits only detect c-JUN when phosphorylated at Ser73. Total c-JUN assay kits detect c-JUN irrespective of phosphorylation status.

As shown, using the c-JUN (p-Ser73) assay kits or Western blot, c-JUN phosphorylation at Ser73 is detected in anisomycin-treated NIH3T3 cells (+), compared with untreated cells (-), whereas no change in total c-JUN levels was observed.



#### Species cross-reactivity:

Tested: Human, Mouse

Expected: Rat

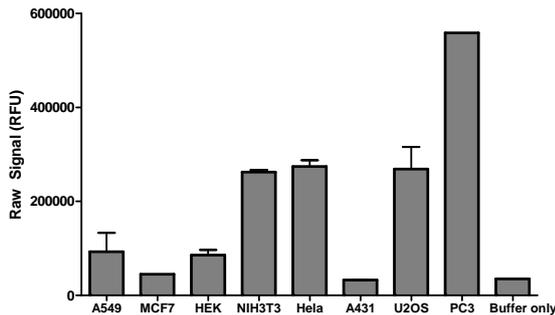
Other species should be tested on a case-by-case basis.

#### QC:

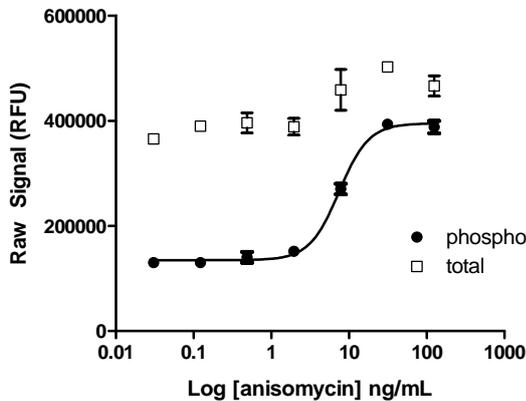
Phospho-c-JUN and total c-JUN assays are routinely tested against anisomycin-treated NIH3T3 cellular lysates. See certificate of analysis for Lot-specific information. Available at [www.tgrbio.com](http://www.tgrbio.com).

## ELISAONE™ c-JUN assay performance

Using the ELISAONE total-c-JUN assay, the expression of c-JUN was examined in several cell lines. Cells were seeded at 40K/well in 96-well microplates, and cultured overnight at 37C in medium containing 10% FBS. The following day, the medium was removed from the wells, and the cells were lysed with 120 µL/well Lysis Mix, with shaking for 10 min. 50 µL of lysate was transferred to replicate wells of an ELISAONE assay plate, and assayed for total c-JUN using the standard ELISAONE protocol. Signal in the wells was determined using a Flexstation (Molecular Devices) plate reader. c-JUN was readily detected in most cell lines, with the exception of MCF7 and A431 cells.



ELISAONE c-JUN assay kits are optimized for the rapid detection of c-JUN in cellular lysates.



HeLa cells were seeded at 40K cells/well in medium containing 10% FBS in a 96 well microplate, and cultured overnight. The following day the culture medium was removed, and the cells were treated with various concentrations of anisomycin diluted in serum-free medium for 30 mins. The medium was removed from the wells, and the cells were lysed with 120 µL/well Lysis Mix, with shaking for 10 min. 50 µL of lysate was transferred to replicate wells of an ELISAONE assay plate, and assayed for total c-JUN using the standard ELISAONE protocol. Signal in the wells was determined using a Flexstation (Molecular Devices) plate reader.

## Ordering Information

ELISAONE Assay Kits are available now from:

**CEDARLANE (www.cedarlanelabs.com)**

**US: 1-800-721-1644**

**CANADA: 1-800-268-5058**

**AXXORA (www.axxora.com)**

**US: 1-858-550-8830**

**Email: axxora-usa@axxora.com**

Product	Pack Size	Catalog
Phospho-c-JUN (p-Ser73)	24 assays	ERS025
	96 assays	EKT025
Total c-JUN	24 assays	ERS035
	96 assays	EKT035

\* ELISAONE assay microplates are not supplied with 24pt kits, and must be purchase separately.

## Complementary Products

ELISAONE™ assay kits are available for the following targets:

### MAPK Signaling:

ERK 1/2, p38 MAPK, JNK/SAPK, c-JUN

### AKT Signaling:

AKT 1/2/3 (p-Thr308), AKT 1/2/3 (p-Ser473), p70S6K, Ribosomal protein S6, GSK3β, BAD

### STAT Signaling:

STAT1, STAT3, STAT5

### NF-κB Signaling:

NF-κB p65, I-κBα, IKKα

### p53 Signaling:

p53

### Wnt Signaling:

β-Catenin, GSK3β

### TGFβ Signaling:

SMAD1, SMAD3

### Protein normalization:

GAPDH

Also available separately:

Product	Pack Size	Catalog
ELISAONE™ 96-well regular microplates	1 plate	EPF001
	5 plates	EPF002
ELISAONE™ 96-well strip-well microplates	1 plate	EPL001
	5 plates	EPL002
5X Lysis Buffer	100mL	EBF001
Enhancer Solution	100mL	EBF002
10X Wash Buffer	500mL	EBF003

Check our website ([www.tgrbio.com](http://www.tgrbio.com)) for the latest information on target availability.