

ELISAONE™ STAT1 Assays

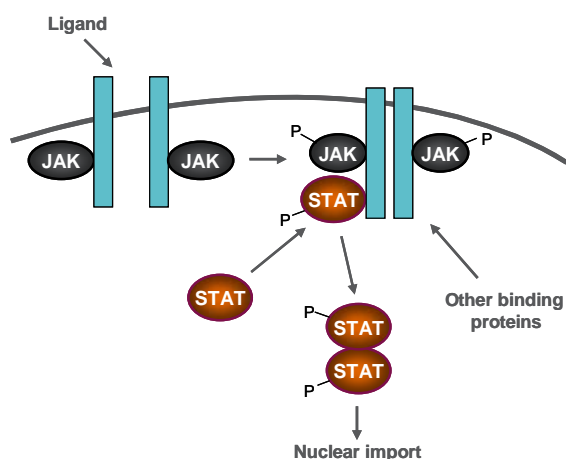
ELISAONE™ assay kits for analysis of cellular STAT1 phosphorylation

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-STAT1 assay

STAT1, which exists as 2 splice variants, STAT1 α and STAT1 β , is a major signaling mediator for interferon receptors, and is also activated by a large number of other ligand/receptor systems. STAT1, activated by phosphorylation at Tyrosine 701 by JAK proteins, dimerizes and is translocated to the nucleus. STAT1 is also phosphorylated at Ser727, via PI3-kinase-dependent or MAPK-dependent pathways.



Dis-regulation of IFN γ -mediated STAT1 signaling has been implicated in many disease processes, such as rheumatoid arthritis, asthma, and celiac disease.

ELISAONE™ STAT1 (p-Tyr701) assay technical specifications

Specificity:

ELISAONE STAT1 (p-Tyr701) assay kits detect endogenous levels of phosphorylated STAT1 (GenBank Accession NP_009330) in cellular lysates. Phospho-STAT1 assay kits only detect STAT1 when phosphorylated at Tyr701.

Species cross-reactivity:

Tested: Human

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

Kit contents:

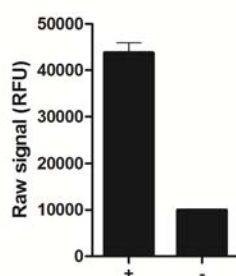
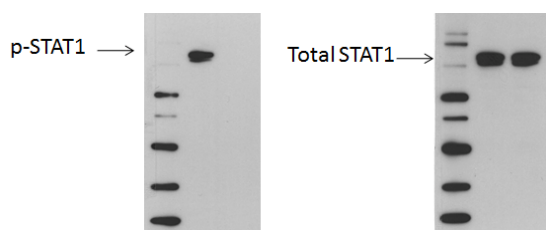
	24-pt Reagent kit	96-well full kit
Capture Antibody Reagent	1 x 0.75 mL	1 x 3.0 mL
Detection Antibody Reagent	1 x 0.75 mL	1 x 3.0 mL
Lysis Buffer (5X)	1 x 2 mL	1 x 8 mL
Enhancer Solution	1 x 0.5 mL	1 x 1 mL
ADHP Dilution Buffer	2 x 1.5 mL	2 x 6 mL
ADHP (100X)	1 x 30 μ L	1 x 120 μ L
Wash Buffer (10X)	1 x 2 mL	1 x 8 mL
Stop Solution	1 x 0.5 mL	1 x 2 mL
Assay Control Lysate	1 x 250 μ L	1 x 250 μ L
ELISA-One™ assay microplate	n/a	1 x 96-well microplate
Adherent plate seals	n/a	2

QC:

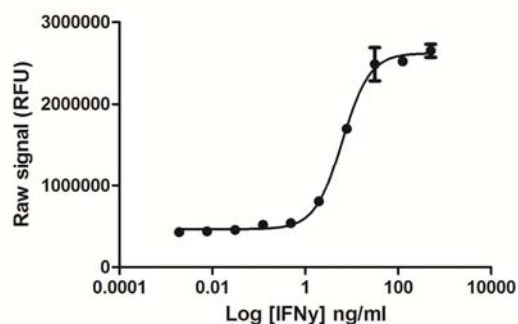
Phospho-STAT1 assays are routinely tested against HeLa cellular lysates. See certificate of analysis for Lot-specific information. Available at www.tgrbio.com.

ELISAONE™ STAT1 assay performance

Using the STAT1 assay kit or Western blot, STAT1 phosphorylation at Tyr701 is detected in interferon- γ -treated HeLa cells (+), compared with untreated HeLa cells (-).



HeLa cells were seeded at 40K cells/well in a 96 well tissue culture microplate overnight. The next day cells were treated with various concentrations of interferon- γ for 20 mins. The medium was removed from the wells, and cells were lysed with 120 μ l/well of Lysis Mix, with shaking for 10 min. The lysates were transferred to an ELISAONE assay plate and assayed for either phospho-STAT1, using the standard protocol. Signal in the wells was determined using an Envision plate reader (PerkinElmer).



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-STAT1 (Y701)	24 assays	EKT030
	96 assays	ERS030

* ELISAONE assay microplates are not supplied with 24pt kits, but can be purchased 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, p70S6K, RPS6, BAD

STAT Signaling:

STAT3, STAT5

NF- κ B Signaling:

NF- κ B p65, I- κ B α , IKK α

Other targets:

p53, CREB1, SMAD1, SMAD3

Wnt Signaling:

β -Catenin, GSK3 β

Protein normalization:

GAPDH

Also available separately:

Product	Pack Size	Catalog
ELISAONE™ 96-wellregular microplates	1 plate	EPF001
	5 plates	EPF002
ELISAONE™ 96-wellstrip-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) for the latest information on target availability.