

ELISAONE™ IKK α Assays

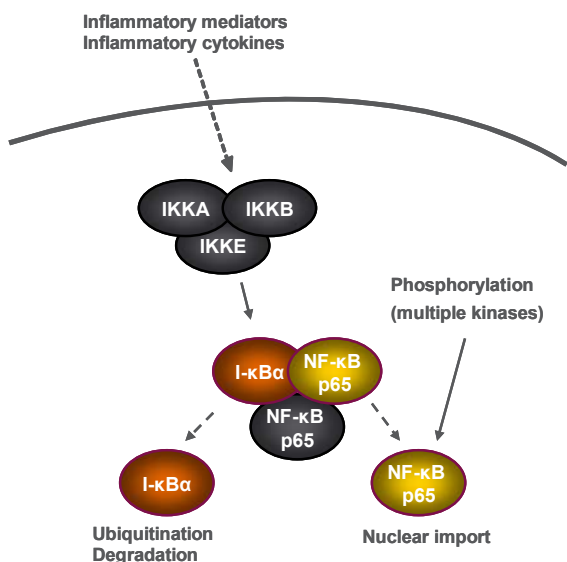
ELISAONE™ assay kits for analysis of cellular IKK α (p-Ser176/180) phosphorylation

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-IKK α and Total IKK α assays

A common pathway for the activation of NF- κ B is based on the phosphorylation and subsequent proteasome-mediated degradation of its inhibitory protein, I- κ B. One of the key steps in this process involves the activation of the I- κ B kinase (IKK) complex, which consists of three IKK subunits.



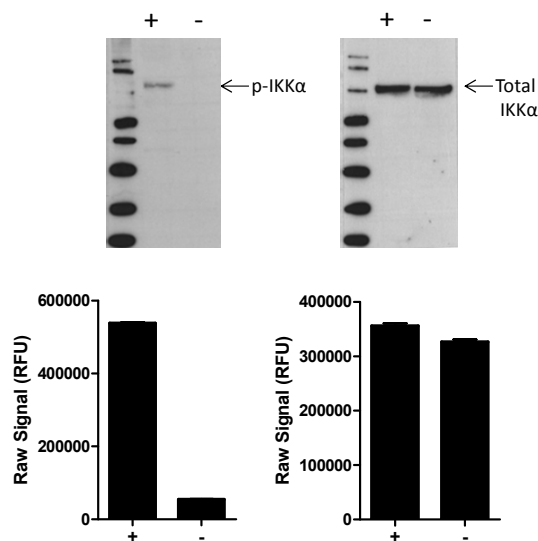
IKK α and IKK β are catalytic subunits of the IKK complex, while IKK γ serves a regulatory function. Phosphorylation of the activation loop of IKK α at Ser176 and Ser180, and at the analogous Ser177/Ser181 site of IKK β , results in conformational change, and kinase activation of the complex.

ELISAONE™ IKK α (p-Ser176/180) assay technical specifications

Specificity:

TGR's ELISAONE IKK α (p-Ser176/180) assay kits detect endogenous levels of IKK α (GenBank Accession NP_001269) in cellular lysates. Phospho-IKK α assay kits only detect IKK α when phosphorylated at Ser176/180. Total IKK α assay kits detect IKK α irrespective of phosphorylation status.

As shown, using the IKK α assay kits or Western blot, IKK α phosphorylation at Ser176/180 is detected in TNF α -treated Hela cells (+), compared with untreated Hela cells (-), whereas no change in total IKK α levels is observed.



Species cross-reactivity:

Tested: Human

Expected: Mouse, Rat

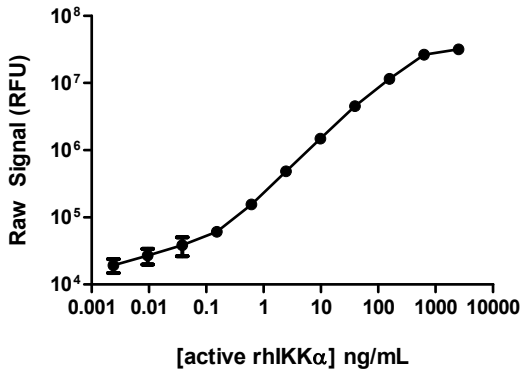
Other species should be tested on a case-by-case basis.

QC:

Phospho-IKK α and total IKK α assays are routinely tested against recombinant active IKK α . See certificate of analysis for Lot-specific information. Available at www.tgrbio.com.

ELISAONE™ IKKα assay performance

Recombinant human active IKKα was prepared at various concentrations in Lysis Mix containing 0.1% BSA. 50 μL of these preparations were transferred to replicate wells of an ELISAONE assay plate, then Antibody Mix specific for phospho- IKKα (50 μL/well) was added. The plates were incubated for 1 hr at room temp, with shaking. Plates were washed and Substrate Mix was added. The plates were covered in foil and incubated for 10 min with shaking. Signal in the wells was determined using a Flexstation (Molecular Devices) plate reader. The results show that IKKα is readily detectable to concentrations of around 100 pg/mL.



ELISAONE IKKα assay kits are optimized for the rapid detection of IKKα in cellular lysates.

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-IKKα (S176/180)	24 assays	ERS029
	96 assays	EKT029
Total IKKα	24 assays	ERS039
	96 assays	EKT039

* ELISAONE assay microplates are not supplied with 24pt kits, and must 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 (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

*coming soon

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.