

ELISAONE™ ERK 1/2 Assays

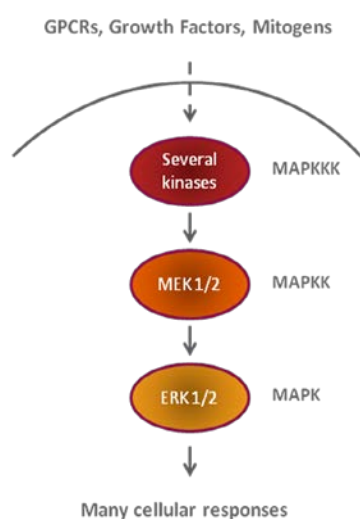
ELISAONE™ assay kits for analysis of cellular ERK 1/2 (p-Thr202/Tyr204) phosphorylation and Total ERK 1/2

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-ERK and Total ERK assays

ERK1 and ERK2, belong to a conserved family of serine/threonine protein kinases. ERK 1/2 form part of a classical MAPK signaling cascade, consisting of a MAP kinase kinase kinase (MAPKKK), a MAP kinase kinase (MAPKK), and a MAP kinase (MAPK).



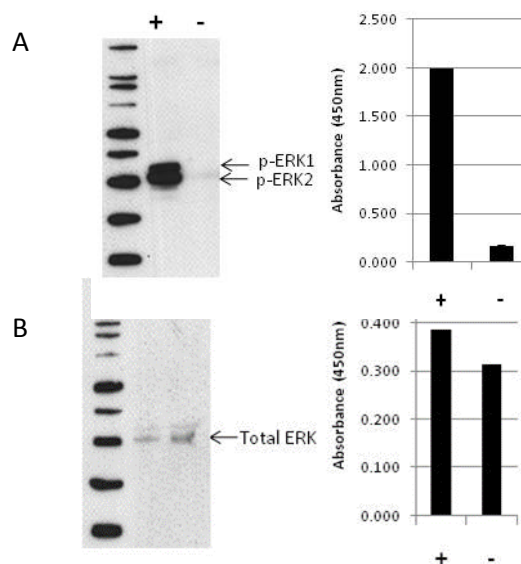
ERK 1/2 are involved in cellular signaling events associated with a range of stimuli, including GPCRs, growth factors, and cytokines. The kinase activity of ERK proteins is regulated by dual phosphorylation at Thr202/Tyr204 in ERK1, and Threonine 185/Tyrosine 187 in ERK2. MEK1 and MEK2 are the primary upstream kinases responsible for ERK 1/2 phosphorylation in this pathway. Several targets of ERK 1/2 have been identified, including downstream kinases and transcription factors.

ELISAONE™ ERK assay technical specifications

Specificity:

TGR's ELISAONE ERK 1/2 assay kits detect endogenous levels of ERK 1/2 (GenBank Accessions NP 002737.2 [ERK1], NP 620407 [ERK2]) in cellular lysates. Phospho-ERK 1/2 assay kits detect ERK only when phosphorylated at Thr202/Tyr204. Total ERK 1/2 assay kits detect ERK irrespective of phosphorylation status.

As shown below, using the ERK 1/2 assay kits, a significant reduction of (A) ERK 1/2 phosphorylation at Thr202/Tyr204 is detected in A431 cells treated with AG1478 for 3 hours (-) compared with cells stimulated with EGF (10ng/mL, 10min) (+), while little change in total ERK levels (B) is observed.



Species cross-reactivity:

Tested: Human, mouse, hamster

Expected: Rat

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

QC: Phospho-ERK and Total-ERK assays are routinely tested against A431 cellular lysates. See certificate of analysis for Lot-specific information. Available at www.tgrbio.com.

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-ERK 1/2 (T202/Y204)	96 assays	EOK001
Total ERK 1/2	96 assays	EOK011

Complementary Products

ELISAONE™ assay kits are available for the following targets:

MAPK Signaling:

ERK 1/2, p38 MAPK, JNK/SAPK

AKT Signaling:

AKT 1/2/3, p70S6K

STAT Signaling:

STAT3, STAT5

NF-κB Signaling:

NF-κB p65, I-κBα

p53 Signaling:

p53

Protein normalization:

GAPDH

Also available separately:

Product	Pack Size	Catalog
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) for the latest information on target availability.