TECHNICAL DATASHEET ELISA- SMAD3

ELISA*ONE™* SMAD3 Assays

ELISAONE™ assay kits for analysis of cellular SMAD3 (p-Ser423/425) phosphorylation

ELISA*ONE™* 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-SMAD3 assays

Mothers against decapentaplegic homolog 3, also known as Smad3, is a member of the Smad family of proteins, which belong to the TGF β superfamily of cell modulators. Smad3 is involved in cell signalling, and mediates signals of activin and TGF β 's for a range of cellular processes. TGF β binding to the receptors induces activation of the receptors, which can then phosphorylate SMAD3 at Ser423 and Ser425, and Smad2 at the corresponding C-terminal site.

transcription of particular genes. TGF β -mediated signaling regulates several cellular processes.

ELISAONE™ SMAD3 (p-Ser423/425) assay technical specifications

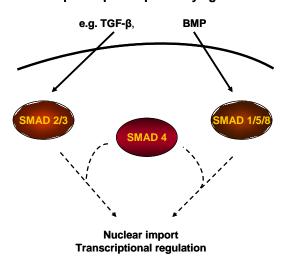
Specificity:

TGR's ELISAONE SMAD3 (p-Ser423/425) assay kits detect endogenous levels of SMAD3 (GenBank Accession NP_001138574) in cellular lysates. Phospho-SMAD3 assay kits only detect SMAD3 when phosphorylated at Ser423/425. Based on sequence similarity, cross reaction to SMAD2 may occur.

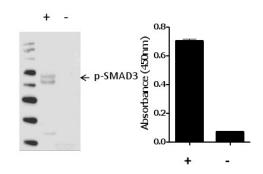
ELISAONE™ p-SMAD3 assay performance

Using the p-SMAD3 assay kit or Western blot, SMAD3 phosphorylation at Ser423/425 is detected in TGF-treated C2C12 cells (+), compared with untreated C2C12 cells.

TGF-β Receptor superfamily ligands



Activated SMADs dimerize with SMAD4, translocate to the nucleus, and stimulate



Species cross-reactivity: Tested: Human, mouse

Expected: Rat

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

QC:

Phospho-SMAD3 assays are routinely tested against C2C12 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-Smad 3 (S423/425)	96 assays	EOK028

Complementary Products

ELISA \textit{ONE}^{TM} 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-κB Signaling: NF-κB p65, I-κBα, IKKα

Other targets:

p53, CREB1, SMAD1, SMAD3

Wnt Signaling: β-Catenin, GSK3β

Protein normalization:

GAPDH

Also available separately:

Product	Pack Size	Catalog
ELISA <i>one™</i> 96-well strip-well	1 plate	EPL001
microplates	5 plates	EPL002
5X Lysis Buffer	100mL	EBF001
Enhancer Solution	100mL	EBF002
10X Wash Buffer	500mL	EBF003

Check our website (<u>www.tgrbio.com</u>) for the latest information on target availability.

