Datasheet for ABIN2866275

Mitogen-Activated Protein Kinase (MAPK) ELISA Kit

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Overview

Quantity:	2 x 96 tests
Target:	Mitogen-Activated Protein Kinase (MAPK)
Reactivity:	Human
Method Type:	DNA-Binding ELISA
Application:	ELISA

Product Details

Purpose:	DNA-binding ELISA that facilitate the study of transcription factor activation in mammalien tissue and cell culture extracts.
Brand:	TransAM®
Sample Type:	Cell Extracts, Tissue Samples
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Specificity:	The TransAM MAPK Family Kit is tested for sensitivity and specificity in detecting MAPK-regulated transcription factor activation.
Characteristics:	Transcription factors are DNA-binding proteins that tightly regulate gene expression. They consist of two distinct domains - one that displays high affinity for a specific DNA sequence and one that confers transcriptional activity. Transcription factors are activated by phosphorylation of specific residues or by processing bound inhibitory proteins. Understanding and quantifying transcription factors is essential for the study of cell functions in relation to differentiation, brain activity, immune response, inflammation and various disease states.

Product Details

	TransAM® Kits are sensitive, non-radioactive transcription factor ELISA kits that facilitate the study of transcription factor activation in mammalian tissue and cell extracts. TransAM® Kits are DNA-binding ELISAs that facilitate the study of transcription factor activation in mammalian tissue and cell extracts. Each kit includes a 96-stripwell plate in which multiple copies of a specific double-stranded oligonucleotide have been immobilized. When nuclear or whole-cell extract is added, activated transcription factor of interest binds the oligonucleotide at its consensus binding site and is quantified using the included antibody, which is specific for the bound, active form of the transcription factor being studied.
Components:	One or five 96-well plate(s) with plate sealer(s), primary antibody, HRP-conjugated secondary antibody, wild-type and mutated competitor oligonucleotides, positive control cell extract, DTT, Protease Inhibitor Cocktail, Lysis, Binding, 10X Washing and 10X Antibody Binding Buffers, and Developing and Stop Solutions.

Target Details

Target:	Mitogen-Activated Protein Kinase (MAPK)
Alternative Name:	Mapk (MAPK Products)
Pathways:	VEGF Signaling

Application Details

Application Notes:	Optimal working dilution should be determined by the investigator.
Comment:	1:1000 dilutions of phosphorylated ATF-2, c-Myc, MEF2 and STAT1a and a 1:500 dilution of phosphorylated c-Jun antibodies are tested using 5 ug/well of nuclear extract prepared from a stimulated cell line: C2C12 for MEF2, HeLa (Anisomycin) for ATF-2, Jurkat (1 day growth) for c-Myc, K-562 (TPA) for c-Jun and U-937 (TPA + IFNg) for STAT1. The relative activation of each family member may vary depending on the cell type tested and the manner in which it was stimulated. TransAM assays are performed in the absense or presence of 20 pmol of competitor oligonucleotide that contains either a wild-type or mutated consensus binding site. The wild-type oligonucleotide prevents binding of the transcription factor to the probe immobilized on the plate. Conversely, the mutated oligonucleotide has a limited effect on transcription factor binding.
Assay Time:	5 h
Plate:	Pre-coated

Application Details

Restrictions:	For Research Use only

Handling

Storage:	4 °C/-20 °C/-80 °C
Storage Comment:	Store the cell extracts at -80°C. All other kit components can be stored at -20°C prior to first use. Then, we recommend storing the kit at 4°C except for the oligonucleotides, the c-Jun, c-Myc and STAT1 antibodies, DTT and Protease Inhibitor Cocktail that should be kept at -20°C. This product is guaranteed for 6 months from date of receipt.
Expiry Date:	6 months

