Datasheet for ABIN2866278

NFATC1 ELISA Kit

Go to Product page

Overview

Quantity:	96 tests
Target:	NFATC1
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:	TransAM NFATc1 Kits are tested for sensitivity in detecting NFATc1 in nuclear extracts from Jurkat cells that are either unstimulated or stimulated for 6.5 hours with 1 µg/mL CD3.
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:	NFATC1
Alternative Name:	Nfatc1 (NFATC1 Products)
Pathways:	RTK Signaling, WNT Signaling, Fc-epsilon Receptor Signaling Pathway

Application Details

Application Notes:	Optimal working dilution should be determined by the investigator.
Comment:	These extracts are diluted down to 0.625 µg/well and assayed using the TransAM NFATc1 Kit. The ratio of the signals from the treated over the untreated cells must be above 3. Lot No. 32313013 was developed for 12 minutes. It gave a ratio of 4.8 (Figure 1). The basal level of NFATc1 expression, and this ratio, may vary depending on the cell type and the activation used. TransAM NFATc1 Kits are also tested for specificity in detecting NFATc1 activation. TransAM NFATc1 assays are performed in the presence of an excess of oligonucleotide containing a wild-type or mutated NFAT consensus binding site (Figure 2). At 20X excess, the wild-type oligonucleotide prevents NFATc1 binding to the probe immobilized on the plate. Conversely, the mutated oligonucleotide has little or no effect on NFATc1 binding.
Assay Time:	5 h
Plate:	Pre-coated
Restrictions:	For Research Use only

Handling

Storage:	4 °C/-20 °C/-80 °C
Storage Comment:	Store the cell extract at -80°C. 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, 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