Datasheet for ABIN2866267

Nuclear Factor kappa B p50 (NFkB p50) ELISA Kit

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Overview

Quantity:	96 tests
Target:	Nuclear Factor kappa B p50 (NFkB p50)
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 Flexi NFκB p50 Kits are tested for sensitivity in detecting NFκB 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. TransAM® Kits are sensitive, non-radioactive transcription factor ELISA kits that facilitate the

Product Details

	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:	Nuclear Factor kappa B p50 (NFkB p50)
Alternative Name:	Nfkb p50

Application Details

Application Notes:	Optimal working dilution should be determined by the investigator.
Comment:	Nuclear extracts prepared from Jurkat cells that are either unstimulated or stimulated with TPA + CI are diluted to 0.625 µg/well and assayed using the TransAM Flexi NFκB p50 Kit. The ratio of the signals from the stimulated over unstimulated cells must be above 4. Lot No. 28312026 was developed for 2 minutes. It gave a ratio of 4 (Figure 1). This ratio may vary depending on the basal level of NFκB activation in a given cell type. TransAM Flexi NFκB p50 Kits are also tested for specificity in detecting NFκB activation. TransAM Flexi NFκB assays are performed in the presence of an excess of competitor oligonucleotide containing a wild-type or mutated NFκB consensus binding site (Figure 2). At 10X excess, the wild-type oligonucleotide prevents NFκB binding to the biotinylated probe. Conversely, the mutated oligonucleotide has no effect on NFκB binding.
Assay Time:	5 h
Plate:	Pre-coated
Restrictions:	For Research Use only

Handling

Storage:	4 °C/-20 °C/-80 °C
Storage Comment:	Except for the cell extract that must be kept at -80°C, the 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