

CREB elisa kit

CREB (Phospho-Ser133) TFact DNA-Binding ELISA Kit

CATALOG #
AAA315876

REACTIVITY
Human, Mouse, Rat

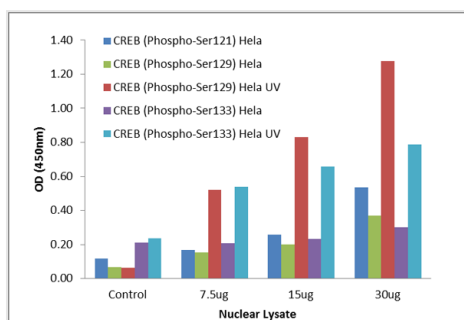
PRODUCT SYNONYMS

CREB; CREB (Phospho-Ser133) TFact DNA-Binding ELISA Kit; cAMP responsive element binding protein 1; cAMP-response element binding protein; CREB-1; CREB1; CREB elisa kit

PRODUCT SPECIFICATIONS

Reactivity	Human, Mouse, Rat
Form/Format	12 x 8-Well Microstrips
Sequence Length	327
Preparation and Storage	Store at 4 degree C for 6 months.

IMAGES



Application Data

The TFact CREB DNA-Binding ELISA kits detect active CREB in HeLa Nuclear Extract. The HeLa cells were grown 3 days in DMEM with 10% FBS and harvested for nuclear extract. The HeLa cells were stimulated by UV (100J/M2) before harvest.

ADDITIONAL INFORMATION

Related Product Information for CREB elisa kit	Principle of the Assay: The TFact™ DNA-Binding ELISA Kit contains components necessary for detection of active transcription factors in eukaryotic nuclear or cell lysates. This particular immunoassay utilizes the qualitative technique of an indirect ELISA. Streptavidin is bound to the immunoassay plate and specific biotinylated double-stranded (dsDNA) oligonucleotides are then added to bind to the streptavidin via a high affinity biotin-streptavidin interaction. After subsequent blocking of extraneous binding sites in each well, the sample containing the target of interest can be added. Primary antibody is added to bind activated transcription factors bound to the dsDNA oligonucleotide, which has been immobilized via the plate-coated streptavidin. A HRP-conjugated secondary antibody specific for rabbit IgGs is added, which allows for specific binding to the Primary Antibody, and consequently colorimetric detection upon addition of the TMB substrate. For color development, TMB (3, 3', 5, 5'-Tetramethylbenzidine) is added to each well. After addition of the substrate, a peroxidase catalyzed reaction will produce a blue TMB Diimine product that is proportional to the target concentration in the sample. Color development is quenched by addition of Stop Solution, or 2 N Sulfuric Acid, which turns the solution yellow. The absorbance can then be read by a spectrophotometer at 450 nm and subsequently allowing for determination of the target concentration in the sample. Currently, the most common methods to detect transcription factor binding to DNA elements and motifs are electrophoretic mobility shift assays (EMSAs), chromatin immunoprecipitation, western blotting, and expression of fused target and reporter genes. These methods are often time consuming, complicated, and make it difficult to achieve satisfactory results. Assay Biotech TFact™ DNA-Binding ELISA Kits can significantly reduce the necessary runtime to within one day and eliminate the need for harmful radioactive labeling while maintaining high sensitivity and signal-to-noise ratio. In the past, it was strenuous and inefficient to perform high-throughput screening for hundreds of different samples or transcription factors. Today, our revolutionary TFact™ DNA-Binding ELISA Kits can eliminate these challenges and help expedite the journey from research to publication or product.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	4758054
NCBI GeneID	1385
NCBI Accession #	NP_004370.1
NCBI GenBank Nucleotide #	NM_004379.4
UniProt Accession #	P16220; P21934; Q6V963; Q9UMA7
Molecular Weight	25,445 Da
NCBI Official Full Name	cyclic AMP-responsive element-binding protein 1 isoform A
NCBI Official Synonym Full Names	cAMP responsive element binding protein 1
NCBI Official Symbol	CREB1
NCBI Official Synonym Symbols	CREB; CREB-1
NCBI Protein Information	cyclic AMP-responsive element-binding protein 1
UniProt Protein Name	Cyclic AMP-responsive element-binding protein 1
UniProt Gene Name	CREB1
UniProt Synonym Gene Names	CREB-1; cAMP-responsive element-binding protein 1

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.