



Datasheet for ABIN5526692

CREB1 ELISA Kit



[Go to Product page](#)

2 Images

Overview

Quantity:	96 tests
Target:	CREB1
Binding Specificity:	phosphorylated
Reactivity:	Human
Method Type:	DNA-Binding ELISA
Application:	ELISA

Product Details

Purpose:	Human pCREB Transcription Factor Activity Assay. This assay uses a dsDNA coated plate with canonical CREB binding sequences phosphorylated at site serine residue 133 to semi-quantitatively detect active pCREB in lysates or nuclear extracts. Only available in North America.
Sample Type:	Cell Lysate, Nuclear Extract
Analytical Method:	Semi-Quantitative
Detection Method:	Colorimetric
Specificity:	The oligonucleotide/antibody pair provided in this kit recognizes human phosphorylated CREB in whole lysates and nuclear extracts.
Characteristics:	<ul style="list-style-type: none">• Specific transcription factor-DNA binding assay• Perfect alternative to EMSA• Easy to perform in an ELISA format• Non-radioactive assay• High throughput (96 well plate format)

Product Details

- Assay can be completed within 5 hours

Components:	<ul style="list-style-type: none">• 96-well Strip Microplate pre-coated with DNA probes• DNA Binding Buffer• Positive Control Sample• Specific Competitor DNA probe• Non-specific Competitor DNA probe• Assay Reagent• DTT• Wash Buffer• Primary Antibody• HRP-conjugated Secondary Antibody• TMB One-Step Substrate Reagent• Stop Solution
-------------	--

Material not included:	<ul style="list-style-type: none">• Distilled or deionized water• 100 mL and 1 liter graduated cylinders• Tubes to prepare sample dilutions Absorbent paper• Precision pipettes to deliver 2 µL to 1 mL volumes• Adjustable 1-25 mL pipettes for reagent preparation• Benchtop rocker or shaker• Microplate reader capable of measuring absorbance at 450 nm
------------------------	--

Target Details

Target:	CREB1
Alternative Name:	CREB (CREB1 Products)
Gene ID:	1385
UniProt:	P16220
Pathways:	TLR Signaling , Fc-epsilon Receptor Signaling Pathway , EGFR Signaling Pathway , Neurotrophin Signaling Pathway , Thyroid Hormone Synthesis , Activation of Innate immune Response , Myometrial Relaxation and Contraction , Regulation of Cell Size , Toll-Like Receptors Cascades , G-protein mediated Events , Interaction of EGFR with phospholipase C-gamma , Positive Regulation of fat Cell Differentiation

Application Details

Application Notes:	Optimal working dilution should be determined by the investigator.
Plate:	Pre-coated

Application Details

Protocol:	<ol style="list-style-type: none">1. Prepare all reagents and samples as instructed in the manual.2. Add 100 μL of sample or positive control to each well.3. Incubate 2 h at RT or O/N at 4 $^{\circ}$C.4. Add 100 μL of prepared primary antibody to each well.5. Incubate 1 h at RT.6. Add 100 μL of prepared HRP-secondary antibody to each well.7. Incubate 1 h at RT.8. Add 100 μL of TMB One-Step Substrate Reagent to each well.9. Incubate 30 min at RT.10. Add 50 μL of Stop Solution to each well.11. Read at 450 nm immediately.
-----------	--

Restrictions: For Research Use only

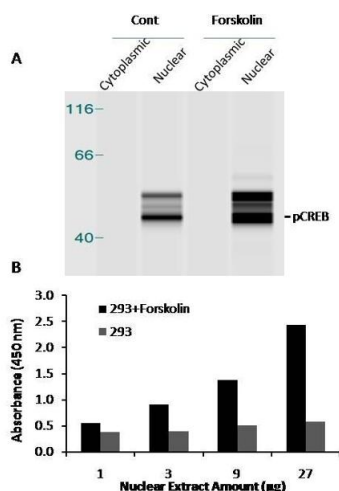
Handling

Storage: -20 $^{\circ}$ C

Storage Comment: Upon receipt, the positive control should be removed and stored at -20 $^{\circ}$ or -80 $^{\circ}$ C. The remainder of the kit can be stored for up to 6 months at 2-8 $^{\circ}$ C from the date of shipment. Opened Microplate Wells or reagents may be stored for up to 1 month at 2 $^{\circ}$ to 8 $^{\circ}$ C. Return unused wells to the pouch containing desiccant pack, reseal along entire edge. Note: The kit can be used within one year if the whole kit is stored at -20 $^{\circ}$ C upon receipt. Avoid repeated freeze-thaw cycles.

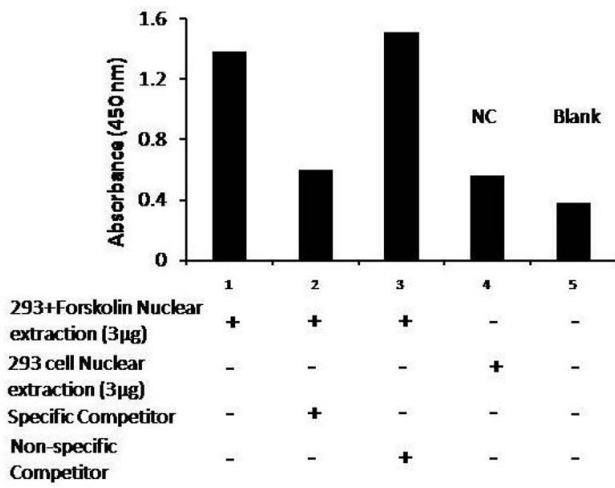
Expiry Date: 6 months

Images



Activity Assay

Image 1. Transcription factor activity assay of CREB from nuclear extracts of HEK293 cells or 293 cells treated with Forskolin (10 μ M) for 4 hr. A. Western-blot result of phosphorylated CREB from cytoplasm and nuclear fractions. B. Transcription factor activity assay of pCREB from nuclear fractions with the pCREB Transcription Factor Activity Assay Kit.



Activity Assay

Image 2. Transcription factor activity assay of pCREB from nuclear extracts of HEK293 cells or 293 cells treated with Forskolin (10µM) for 4 hr with the specific competitor or non-specific competitor. The result shows specific binding of pCREB to the CREB binding site.