

Datasheet for ABIN4889776

HIF1A ELISA Kit**2** Images[Go to Product page](#)

Overview

Quantity:	96 tests
Target:	HIF1A
Reactivity:	Human
Method Type:	DNA-Binding ELISA
Application:	ELISA

Product Details

Purpose:	Human HIF-1 α Transcription Factor Activity Assay. This assay uses a dsDNA coated plate with canonical HIF-1 α binding sequences to semi-quantitatively detect active HIF-1 α 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 HIF-1 α 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)• Assay can be completed within 5 hours

Product Details

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
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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
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Target Details

Target:	HIF1A
Alternative Name:	HIF-1 alpha (HIF1A Products)
UniProt:	Q16665
Pathways:	Positive Regulation of Peptide Hormone Secretion , Regulation of Hormone Metabolic Process , Regulation of Hormone Biosynthetic Process , Cellular Response to Molecule of Bacterial Origin , Carbohydrate Homeostasis , Transition Metal Ion Homeostasis , Tube Formation , Regulation of Carbohydrate Metabolic Process , Signaling Events mediated by VEGFR1 and VEGFR2 , VEGFR1 Specific Signals , Warburg Effect

Application Details

Application Notes:	Optimal working dilution should be determined by the investigator.
Sample Volume:	100 µL
Plate:	Pre-coated
Protocol:	1. Prepare all reagents and samples as instructed in the manual.

Application Details

- 2. Add 100 µL of sample or positive control to each well.
- 3. Incubate 2 h at RT or O/N at 4 °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

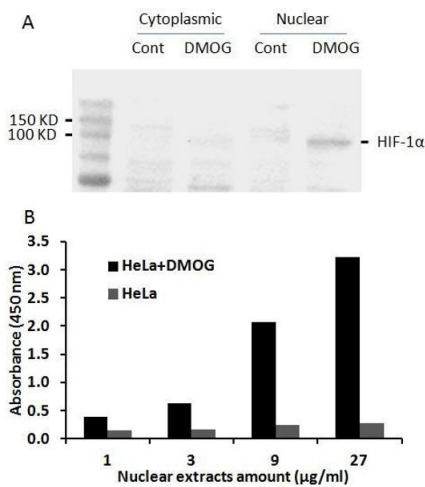
Storage: -20 °C

Storage Comment: Upon receipt, the positive control should be removed and stored at -20° or -80°C. The remainder of the kit can be stored for up to 6 months at 2-8°C from the date of shipment. Opened Microplate Wells or reagents may be stored for up to 1 month at 2° to 8°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°C upon receipt. Avoid repeated freeze-thaw cycles.

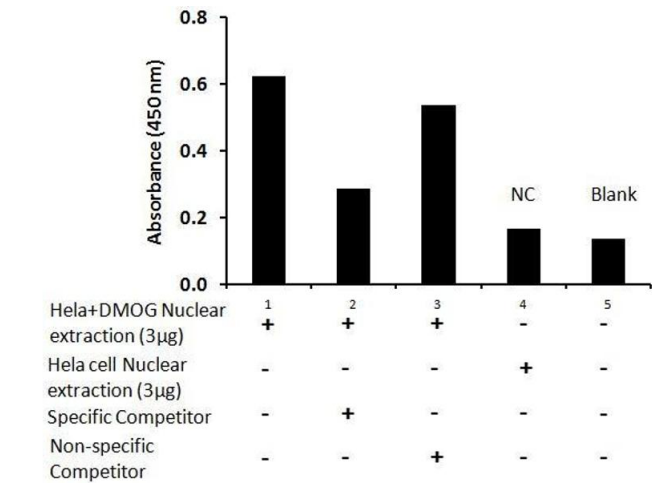
Expiry Date: 6 months

Images



Activity Assay

Image 1. Transcription factor activity assay of HIF-1α from nuclear extracts of HeLa cells or HeLa cells treated with DMOG (1mM) for 4 hr. A. Western-blot result of HIF-1α from cytoplasm and nuclear fractions. B. Transcription factor activity assay of HIF-1α from nuclear fractions with the HIF-1α Transcription Factor Activity Assay Kit.



Activity Assay

Image 2. Transcription factor activity assay of HIF-1α from nuclear extracts of HeLa cells or HeLa cells treated with DMOG (1mM) for 4 hr with the specific competitor or non-specific competitor. The result shows specific binding of HIF-1α to the HRE binding site.