

Datasheet for ABIN5690759

p53 ELISA Kit

2 Images



[Go to Product page](#)

Overview

| | |
|--------------|-------------------|
| Quantity: | 96 tests |
| Target: | p53 (TP53) |
| Reactivity: | Human |
| Method Type: | DNA-Binding ELISA |
| Application: | ELISA |

Product Details

| | |
|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Purpose: | Human p53 Transcription Factor Activity Assay. This assay uses a dsDNA coated plate with canonical p53 binding sequences to semi-quantitatively detect active p53 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 p53 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 |
|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

| | |
|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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: | p53 (TP53) |
| Alternative Name: | p53 (TP53 Products) |
| Gene ID: | 7157 |
| UniProt: | P04637 |
| Pathways: | p53 Signaling , MAPK Signaling , PI3K-Akt Signaling , Apoptosis , AMPK Signaling , Chromatin Binding , ER-Nucleus Signaling , Positive Regulation of Endopeptidase Activity , Hepatitis C , Protein targeting to Nucleus , Autophagy , Warburg Effect |

Application Details

| | |
|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Plate: | Pre-coated |
| 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 °C.4. Add 100 μL of prepared primary antibody to each well. |

Application Details

5. Incubate 1 h at RT.
6. Add 100 μ L of prepared HRP-secondary antibody to each well.
7. Incubate 1 h at RT.
8. Add 100 μ L of TMB One-Step Substrate Reagent to each well.
9. Incubate 30 min at RT.
10. Add 50 μ L of Stop Solution to each well.
11. Read at 450 nm immediately.

Restrictions: For Research Use only

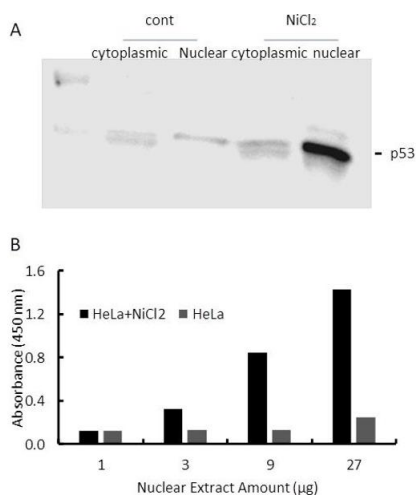
Handling

Storage: 4 °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.

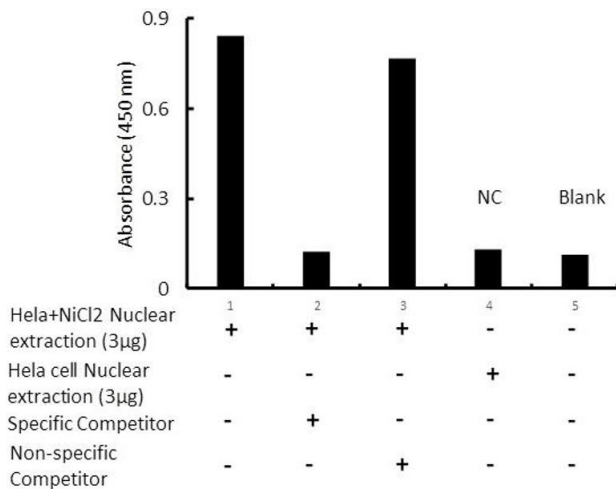
Expiry Date: 6 months

Images



Activity Assay

Image 1. Transcription factor assay of p53 from nuclear extracts of HeLa cells or HeLa cells treated with NiCl₂. After stimulation activated p53 binds with its corresponding DNA. A. Western-blot result of p53 from cytoplasm and nuclear fractions. B. Transcription factor assay of p53 from nuclear fractions with p53 TF-Activity Assay Kit.



Activity Assay

Image 2. Transcription factor assay of p53 from nuclear extracts of HeLa cells or HeLa cells treated with NiCl₂ with the specific competitor or non-specific competitor. The result shows specific binding of p53 to the p53 DNA binding site.