Nitrotyrosine ELISA Kit ab113848

**Overview**

- **Product name**: Nitrotyrosine ELISA Kit
- **Detection method**: Colorimetric
- **Assay type**: Competitive
- **Assay duration**: Multiple steps standard assay

**Product overview**

This nitrotyrosine (3-nitrotyrosine, 3NT) competitive ELISA is used to determine the level of nitrotyrosine modified proteins in a sample. The provided microplates have been evenly coated with a nitrotyrosine containing antigen. The competitive ELISA is performed by adding the test sample mixed with the provided HRP conjugated anti-3NT antibody. If no 3NT modified proteins are present in the sample, all of the anti-3NT detector antibody is available to bind to the immobilized 3NT containing protein coating the wells, generating a maximum (100%) binding signal. In contrast, if soluble 3NT modified protein is present in the sample, it will compete for binding by the anti-3NT detector antibody. The degree of competition is proportional to the concentration of soluble 3NT modified proteins in the sample. Therefore the signal in each well has an inverse relationship to the amount of 3NT in each sample. When performing each assay a standard curve is generated from the provided standard to allow the accurate quantitation of the 3NT content in the test samples.

The assay is followed by monitoring the HRP dependant color change in each well at 600 nm. Alternatively, the assay can be terminated, at a user-defined time, by the addition of 1N HCl (not supplied) and the assay performed as an end-point measurement at 450 nm.

**Tested applications**

Suitable for: Competitive ELISA

**Platform**

Microplate

**Properties**

**Storage instructions**

Store at +4°C. Please refer to protocols.

<table>
<thead>
<tr>
<th>Components</th>
<th>2 x 96 tests</th>
</tr>
</thead>
<tbody>
<tr>
<td>10X Blocking Solution</td>
<td>1 x 10ml</td>
</tr>
<tr>
<td>1X HRP Development Solution</td>
<td>1 x 24ml</td>
</tr>
<tr>
<td>20X Wash Buffer</td>
<td>1 x 25ml</td>
</tr>
</tbody>
</table>
Components

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-nitrotyrosine BSA standard</td>
<td>1 vial</td>
</tr>
<tr>
<td>Extraction Buffer</td>
<td>1 x 15ml</td>
</tr>
<tr>
<td>HRP conjugated 3NT Detector Antibody (1000X)</td>
<td>1 x 0.04ml</td>
</tr>
<tr>
<td>Nitrotyrosine coated 96-well solid plate</td>
<td>2 units</td>
</tr>
<tr>
<td>Plate Seals</td>
<td>2 units</td>
</tr>
</tbody>
</table>

Applications

Our Abpromise guarantee covers the use of **ab113848** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

<table>
<thead>
<tr>
<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competitive ELISA</td>
<td></td>
<td>Use at an assay dependent concentration.</td>
</tr>
</tbody>
</table>

Images

Standard Curve Using 3NT-BSA Equivalents

Example standard curve in 3NT BSA equivalents.

Standard Curve Using 3NT-BSA molarity

The same example standard curve in 3NT molarity.
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