Product datasheet

Human Interferon gamma ELISA Kit (IFNG) ab108863

Overview

Product name: Human Interferon gamma ELISA Kit (IFNG)
Detection method: Colorimetric

<table>
<thead>
<tr>
<th>Sample</th>
<th>n</th>
<th>Mean</th>
<th>SD</th>
<th>CV%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td></td>
<td></td>
<td></td>
<td>5.2%</td>
</tr>
</tbody>
</table>

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<thead>
<tr>
<th>Sample</th>
<th>n</th>
<th>Mean</th>
<th>SD</th>
<th>CV%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td></td>
<td></td>
<td></td>
<td>9.8%</td>
</tr>
</tbody>
</table>

Sample type: Cell culture supernatant, Serum, Plasma
Assay type: Sandwich (quantitative)
Sensitivity: > 0.01 ng/ml
Range: 0.016 ng/ml - 1 ng/ml
Recovery: 101%
Assay time: 5h 00m
Assay duration: Multiple steps standard assay

Species reactivity: Reacts with: Human

Product overview

Abcam’s Interferon gamma (IFNG) Human in vitro ELISA (Enzyme-Linked Immunosorbent Assay) kit is designed for the quantitative measurement of Interferon gamma levels in cell culture supernatants, serum and plasma.

An Interferon gamma specific antibody has been precoated onto 96-well plates and blocked. Standards or test samples are added to the wells and subsequently an Interferon gamma specific biotinylated detection antibody is added and then followed by washing with wash buffer. Streptavidin-Peroxidase Conjugate is added and unbound conjugates are washed away with wash buffer. TMB is then used to visualize Streptavidin-Peroxidase enzymatic reaction. TMB is catalyzed by Streptavidin-Peroxidase to produce a blue color product that changes into yellow after adding acidic stop solution. The density of yellow coloration is directly proportional to the amount of Interferon gamma captured in plate.
The entire kit may be stored at -20°C for long term storage before reconstitution - Avoid repeated freeze-thaw cycles.

**Tested applications**

**Suitable for:** Sandwich ELISA

**Platform**

Microplate

**Properties**

**Storage instructions**

Please refer to protocols.

<table>
<thead>
<tr>
<th>Components</th>
<th>1 x 96 tests</th>
</tr>
</thead>
<tbody>
<tr>
<td>100X Streptavidin-Peroxidase Conjugate</td>
<td>1 x 80µl</td>
</tr>
<tr>
<td>10X Diluent M Concentrate</td>
<td>1 x 20ml</td>
</tr>
<tr>
<td>1X Standard Diluent</td>
<td>1 x 2ml</td>
</tr>
<tr>
<td>20X Wash Buffer Concentrate</td>
<td>2 x 30ml</td>
</tr>
<tr>
<td>40X Biotinylated Human Interferon gamma Antibody</td>
<td>1 x 150µl</td>
</tr>
<tr>
<td>Chromogen Substrate</td>
<td>1 x 8ml</td>
</tr>
<tr>
<td>Interferon gamma Microplate (12 x 8 well strips)</td>
<td>1 unit</td>
</tr>
<tr>
<td>Interferon gamma Standard</td>
<td>1 vial</td>
</tr>
<tr>
<td>Sealing Tapes</td>
<td>3 units</td>
</tr>
<tr>
<td>Stop Solution</td>
<td>1 x 12ml</td>
</tr>
</tbody>
</table>

**Function**

Produced by lymphocytes activated by specific antigens or mitogens. IFN-gamma, in addition to having antiviral activity, has important immunoregulatory functions. It is a potent activator of macrophages, it has antiproliferative effects on transformed cells and it can potentiate the antiviral and antitumor effects of the type I interferons.

**Tissue specificity**

Released primarily from activated T lymphocytes.

**Involvement in disease**

In Caucasians, genetic variation in IFNG is associated with the risk of aplastic anemia (AA) [MIM:609135]. AA is a rare disease in which the reduction of the circulating blood cells results from damage to the stem cell pool in bone marrow. In most patients, the stem cell lesion is caused by an autoimmune attack. T-lymphocytes, activated by an endogenous or exogenous, and most often unknown antigenic stimulus, secrete cytokines, including IFN-gamma, which would in turn be able to suppress hematopoiesis.

**Sequence similarities**

Belongs to the type II (or gamma) interferon family.

**Post-translational modifications**

Proteolytic processing produces C-terminal heterogeneity, with proteins ending alternatively at Gly-150, Met-157 or Gly-161.

**Cellular localization**

Secreted.
Applications

Our Abpromise guarantee covers the use of ab108863 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>Sandwich ELISA</td>
<td></td>
<td>Use at an assay dependent dilution.</td>
</tr>
</tbody>
</table>

Images

Representative Standard Curve using ab108863.

Typical Standard Curve

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- We investigate all quality concerns to ensure our products perform to the highest standards

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