Product name: Human IgG ELISA Kit

Detection method: Colorimetric

Sample type: Serum, Plasma

Assay type: Sandwich (quantitative)

Sensitivity: < 20 pg/ml

Range: 0.02 ng/ml - 15 ng/ml

Recovery: 117 %

Sample specific recovery

<table>
<thead>
<tr>
<th>Sample type</th>
<th>Average %</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serum</td>
<td>116.1</td>
<td>105% - 123%</td>
</tr>
<tr>
<td>Plasma</td>
<td>118.1</td>
<td>99% - 126%</td>
</tr>
</tbody>
</table>

Assay duration: Multiple steps standard assay

Species reactivity: Reacts with: Human

Product overview: Human IgG ELISA kit is designed for the quantitative measurement of Human IgG in serum and plasma.

Notes: The Human immune system consists of two functional components classified as the innate system (the physical, biochemical and cellular barriers), and the adaptive immune system (including lymphocytes and immunoglobulins). Immunoglobulins are the key elements of the humoral immune response in vertebrate against parasitic invasion.

The polypeptide chains of immunoglobulins composed of two identical heavy (H) chains and two identical light (L) chains linked together by inter-chain disulfide bonds. While the amino-terminal portions that exhibits highly variable amino-acid composition are involved in antigen binding, the C terminal constant parts are involved in complement binding, placentral passage and binding to cell membranes. Based upon the variation of the constant region of the heavy chain, nine immunoglobulin heavy chain isotypes are found in humans: IgA (with subclasses IgA1 and IgA2), IgD, IgE, IgM, and IgG (with subclasses IgG1, IgG2, IgG3, and IgG4).
IgG is the predominant immunoglobulin in the serum, which accounts for 75% of the total serum antibody of healthy individuals. IgG has a molecular weight of about 150 kDa. Four distinct subgroups of human IgG (IgG1, IgG2, IgG3, and IgG4) were first demonstrated in the 1960’s by using polyclonal antisera prepared in animals immunized with human myeloma proteins.

The capture antibody of the kit ab100547 detects the Fc portion of the heavy chain of all subclasses of human IgG and the detection antibody detects the F(ab')2 fragment of IgG.

**Platform**

Microplate

**Properties**

**Storage instructions**

Store at -20°C. Please refer to protocols.

<table>
<thead>
<tr>
<th>Components</th>
<th>1 x 96 tests</th>
</tr>
</thead>
<tbody>
<tr>
<td>20X Wash Buffer</td>
<td>1 x 25ml</td>
</tr>
<tr>
<td>4,000X HRP-Streptavidin Concentrate</td>
<td>1 x 200µl</td>
</tr>
<tr>
<td>5X Assay Diluent</td>
<td>2 x 15ml</td>
</tr>
<tr>
<td>Biotinylated anti-Human IgG</td>
<td>2 vials</td>
</tr>
<tr>
<td>IgG Microplate (12 x 8 wells)</td>
<td>1 unit</td>
</tr>
<tr>
<td>Recombinant Human IgG Standard (lyophilized)</td>
<td>2 vials</td>
</tr>
<tr>
<td>Stop Solution</td>
<td>1 x 8ml</td>
</tr>
<tr>
<td>TMB One-Step Substrate Reagent</td>
<td>1 x 12ml</td>
</tr>
</tbody>
</table>

**Cellular localization**

Secreted

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Sandwich ELISA - ab100547 huIgG
Representative standard curve using ab100547

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