**Product name**  
Mouse IgG ELISA Kit

**Detection method**  
Colorimetric

**Precision**

<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>3</td>
<td></td>
<td></td>
<td>3.3%</td>
</tr>
</tbody>
</table>

**Sample type**  
Serum, Cell culture media, Mouse IgG

**Assay type**  
Sandwich (quantitative)

**Sensitivity**  
1 ng/ml

**Recovery**  
Sample specific recovery

<table>
<thead>
<tr>
<th>Sample type</th>
<th>Average %</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serum</td>
<td>89</td>
<td>% - %</td>
</tr>
<tr>
<td>Cell culture media</td>
<td>85</td>
<td>% - %</td>
</tr>
<tr>
<td>Goat Serum</td>
<td>96</td>
<td>% - %</td>
</tr>
</tbody>
</table>

**Assay time**  
3h 15m

**Assay duration**  
Multiple steps standard assay

**Species reactivity**  
Reacts with: Mouse, Rat  
Does not react with: Goat, Cow

**Product overview**  
ab151276, an IgG mouse ELISA (Enzyme-Linked Immunosorbent Assay) kit is an in vitro enzyme-linked immunosorbent assay for the quantitative measurement of mouse IgG in mouse serum, plasma and supernatant from cell cultures.
This assay employs a mouse IgG specific antibody coated onto plate strips. Standards and samples are pipetted into the wells and IgG present in the sample is bound to the wells by the immobilized antibody. The wells are washed and an HRP-conjugated anti-mouse IgG detector antibody is added. After washing away unbound detector antibody, a TMB substrate solution is added to the wells and color develops in proportion to the amount of IgG bound. The developing blue color is measured at 600 nm. Optionally the reaction can be stopped with the Stop Solution which changes the color from blue to yellow and the intensity can be measured at 450 nm.

**Notes**

There are five classes of mammalian immunoglobulins: IgA, IgD, IgE, IgM, and IgG. IgG is the most abundant immunoglobulin and is equally distributed in blood and tissue. In mice, the IgG class is further divided into four subclasses: IgG1, IgG2a/ IgG2c (strain specific), IgG2b, and IgG3. The general immunoglobulin structure is composed of four polypeptide chains, two heavy and two light chains linked together and to each other by disulfide bonds, creating a tetrameric quaternary structure. The resulting tetramer creates two identical halves which together form a Y like structure. While the amino-terminal portions that exhibit highly variable amino-acid composition are involved in antigen binding, the C terminal constant parts are involved in complement binding, placental passage and binding to cell membrane. IgG is involved in response to a foreign antigen. The presence of IgG usually signifies a mature antibody response. IgG has a molecular weight of about 150 kDa, it can bind to many pathogens and also plays an important role in antibody-dependent cell-mediated cytotoxicity. Typically mouse serum and plasma samples contain about 7 to 10 mg/ml of IgG.

**Platform**

Microplate

**Properties**

**Storage instructions**

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

<table>
<thead>
<tr>
<th>Components</th>
<th>1 x 96 tests</th>
</tr>
</thead>
<tbody>
<tr>
<td>10X Blocking Buffer</td>
<td>1 x 6ml</td>
</tr>
<tr>
<td>10X GAM (H+L)-HRP Detector Antibody</td>
<td>1 x 1ml</td>
</tr>
<tr>
<td>20X Buffer</td>
<td>1 x 20ml</td>
</tr>
<tr>
<td>HRP Development Solution</td>
<td>1 x 6ml</td>
</tr>
<tr>
<td>IgG Mouse Microplate</td>
<td>1 unit</td>
</tr>
<tr>
<td>Normal Mouse IgG Standard (Lyophilized)</td>
<td>1 x 1µg</td>
</tr>
<tr>
<td>Stop Solution</td>
<td>1 x 12ml</td>
</tr>
</tbody>
</table>

**Cellular localization**

Secreted

**Images**

2
A dilution series of standard mouse immunoglobulin G (IgG) in the working range of the assay.

Example standard curve

Demonstration of the component requirement test.

Demonstration of the tested species specificity.
Top image: Example dilution series of normal mouse serum (NMS) in the working range of the assay. Bottom image: Example dilution series of a mouse hybridoma cell culture media (TCM) in the working range of the assay.

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