Human IgM ELISA Kit ab137982

Overview

**Product name**
Human IgM 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>4.4%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Sample type**
Cell culture supernatant, Saliva, Milk, Urine, Serum, Plasma

**Assay type**
Sandwich (quantitative)

**Sensitivity**
> 0.5 ng/ml

**Range**
1.563 ng/ml - 100 ng/ml

**Recovery**
98%

**Assay time**
4h 0m

**Assay duration**
Multiple steps standard assay

**Species reactivity**
Reacts with: Human

**Product overview**

Human IgM in vitro ELISA (Enzyme-Linked Immunosorbent Assay) kit is designed for the quantitative measurement of IgM in plasma, serum, urine, saliva, milk, CSF and cell culture supernatants.

An IgM specific antibody has been precoated onto 96-well plates and blocked. Standards or test samples are added to the wells and subsequently an IgM 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 IgM captured in plate.
Get results in 90 minutes with Human IgM ELISA Kit (ab214568) from our SimpleStep ELISA range.

**Tested applications**

Suitable for: Sandwich ELISA

**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>100X Streptavidin-Peroxidase Conjugate</td>
<td>1 x 80µl</td>
</tr>
<tr>
<td>10X Diluent N Concentrate</td>
<td>1 x 30ml</td>
</tr>
<tr>
<td>20X Wash Buffer Concentrate</td>
<td>2 x 30ml</td>
</tr>
<tr>
<td>50X Biotinylated Human IgM Antibody</td>
<td>1 x 120µl</td>
</tr>
<tr>
<td>Chromogen Substrate</td>
<td>1 x 8ml</td>
</tr>
<tr>
<td>IgM Microplate (12 x 8 well strips)</td>
<td>1 unit</td>
</tr>
<tr>
<td>IgM 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>

**Relevance**

IgM normally constitutes about 10% of serum immunoglobulins. IgM antibody is prominent in early immune responses to most antigens and predominates in certain antibody responses such as 'natural' blood group antibodies. IgM (with IgD) is the major immunoglobulin expressed on the surface of B cells. The gene for the mu constant region contains four domains separated by short intervening sequences. Class specific anti immunoglobulin antibodies are useful for: The characterization of malignant B cell proliferations. All but acute lymphocytic leukemias share either surface or intra cytoplasmic Ig with an isotypic restriction, which suggest the monoclonal nature of the cell population. Most of the chronic lymphocytic leukemias, non Hodgkin lymphomas and Burkitt's lymphoma bear surface IgM, whereas plasmocytes from Waldenström's disease bear intracytoplasmic IgM. The other isotypes are less frequently found. On the other hand multiple myelomas are usually of the IgG or IgA type. Characterization of plasma cells in inflammatory conditions: Plasma cell typing can be of use for the classification of intestinal inflammatory conditions such as inflammatory bowel disease and allergic conditions. In the latter a specific increase in the number of IgE plasma cells can be demonstrated.

**Applications**

Our Abpromise guarantee covers the use of ab137982 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.
### Application | Abreviews | Notes
---|---|---
Sandwich ELISA | Use at an assay dependent concentration.

### Images

**Representative Standard Curve using ab137982.**

![Typical Standard Curve](Image)

**IgM measured in biological fluids, background signal subtracted (duplicates +/- SD).**

![Sandwich ELISA - IgM Human ELISA Kit (ab137982)](Image)

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**Please note:** All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE"

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