**PRODUCT INFORMATION**

**Contents:** 100 µg purified Anti-hCD20-Of-hIgG1 monoclonal antibody (mAb), provided azide-free and lyophilized

**Target:** Human CD20

**Antibody type:** Type I (first generation anti-hCD20 mAb)

**Source:** CHO cells

**Isotype:** Human IgG1

**Light chain type:** Kappa

**Purity:** Protein G purified

**Formulation:** 0.2 mM filtered solution in 68 mM sodium phosphate buffer (pH 7.4) with 91 mM glycine, 5% w/v saccharose and stabilizing agents

**Tested applications:** Flow cytometry

**Antibody resuspension**
Add 1 ml of sterile water to obtain a concentration of 0.1 mg/ml.

**Storage and stability**
- Product is shipped at room temperature. Store lyophilized antibody at -20 °C. Lyophilized product is stable for 1 year when stored at -20 °C.
- Reconstituted antibody is stable for 1 month when stored at 4 °C and for 1 year when aliquoted and stored at -20 °C. Avoid repeated freeze-thaw cycles.

**Quality control**
- Binding of Anti-hCD20-Of-hIgG1 to human CD20 has been tested using flow cytometry.
- The complete sequence of this antibody has been verified.
- The absence of bacterial contamination, lipoproteins and endotoxins, has been confirmed using HEK-Blue™ TLR2 and HEK-Blue™ TLR4 cells.

**ANTIBODY ISOTYPE COLLECTION**

For your research, InvivoGen offers an Anti-hCD20-Of (type I mAb) antibody family consisting of 3 different Fc isotypes, either native or engineered (IgG1, IgG4 (S228P), and IgA2). These mAbs vary in their potency to mediate effector functions, such as complement-dependent cytotoxicity (CDC), antibody-dependent cellular cytotoxicity (ADCC) and antibody-dependent cellular phagocytosis (ADCP), as presented in the table below.

<table>
<thead>
<tr>
<th>Effector function</th>
<th>Native Isotypes</th>
<th>Engineered Isotypes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>IgG1</td>
<td>IgA2</td>
</tr>
<tr>
<td>ADCC</td>
<td>++</td>
<td>+</td>
</tr>
<tr>
<td>ADCP</td>
<td>+++</td>
<td>+</td>
</tr>
<tr>
<td>CDC</td>
<td>++</td>
<td>-</td>
</tr>
</tbody>
</table>

**DESCRIPTION**

Anti-hCD20-Of-hIgG1 mAb features the constant region of the human IgG1 isotype and the variable region of Ofatumumab. The clinically approved antibody, Ofatumumab, is a fully human IgG1 type I (first generation) monoclonal antibody that targets the CD20 antigen found on the surface of malignant and normal B lymphocytes. Binding of Ofatumumab to CD20 results in cell death of B lymphocytes through CDC and ADCC+ . Ofatumumab has been approved by the FDA for the treatment of chronic lymphocytic leukemia (CLL).

Human IgG1 is the most abundant immunoglobin present in serum and binds with high affinity to the Fc receptor on phagocytic cells. The human IgG1 isotype displays high CDC, high ADCC, and very high ADCP.

Anti-hCD20-Of-hIgG1 was generated by recombinant DNA technology. It has been produced in CHO cells and by affinity chromatography with protein G.

As negative controls, InvivoGen provides antibody isotypes targeting E. coli β-galactosidase (β-Gal). To help you find the most suitable antibody for your research, InvivoGen also provides another type I (Rituximab) and type II (second generation; Obinutuzumab) anti-hCD20 mAbs (see related products).


**RELATED PRODUCTS**

<table>
<thead>
<tr>
<th>Product</th>
<th>Catalog Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anti-β-Gal-hIgG1 (Negative control)</td>
<td>bgal-mab1</td>
</tr>
<tr>
<td>Anti-hCD20-Of-hIgG4 (S228P)</td>
<td>hdc20of-mab14</td>
</tr>
<tr>
<td>Anti-hCD20-Of-hIgA2</td>
<td>hdc20of-mab7</td>
</tr>
<tr>
<td>Anti-hCD20-hIgG1 (Rituximab)</td>
<td>hdc20-mab1</td>
</tr>
<tr>
<td>Anti-hCD20-Ga-hIgG1 (Obinutuzumab)</td>
<td>hdc20ga-mab13</td>
</tr>
</tbody>
</table>

Isotype collections for other clinically relevant antibodies, such as Anti-hCTLA4 (Ipilimumab), Anti-hPD1 (Nivolumab) and Anti-HER2 (Trastuzumab) are also available.

For more information visit https://www.invivogen.com/antibody-isotypes.