Datasheet: MCA1710PBT

### Description
MOUSE ANTI HUMAN CD20: Pacific Blue®

### Specificity
CD20

### Format
Pacific Blue®

### Product Type
Monoclonal Antibody

### Clone
2H7

### Isotype
IgG2b

### Quantity
25 TESTS/0.25ml

### RRID
AB_1101197

### Applications
This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit [www.bio-rad-antibodies.com/protocols](http://www.bio-rad-antibodies.com/protocols).

<table>
<thead>
<tr>
<th>Application</th>
<th>Yes</th>
<th>No</th>
<th>Not Determined</th>
<th>Suggested Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flow Cytometry</td>
<td>✓</td>
<td></td>
<td></td>
<td>Neat - 1/5</td>
</tr>
<tr>
<td>Immunofluorescence</td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Where this antibody has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the antibody for use in their own system using appropriate negative/positive controls.

### Target Species
Human

### Species Cross Reactivity
Reacts with: Rhesus Monkey

**N.B.** Antibody reactivity and working conditions may vary between species.

### Product Form
Purified IgG conjugated to Pacific Blue® - liquid.

### Max Ex/Em
<table>
<thead>
<tr>
<th>Fluorophore</th>
<th>Excitation Max (nm)</th>
<th>Emission Max (nm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pacific Blue®</td>
<td>410</td>
<td>455</td>
</tr>
</tbody>
</table>

### Preparation
Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant

### Buffer Solution
Phosphate buffered saline

### Preservative Stabilisers
- 0.09% Sodium Azide
- 1% Bovine Serum Albumin

### Approx. Protein Concentrations
IgG concentration 0.05 mg/ml
**External Database Links**

- UniProt: [P11836](https://www.uniprot.org/uniprot/P11836) Related reagents

**Synonyms**

- CD20

**Specificity**

*Mouse anti Human CD20 antibody, clone 2H7* recognizes the human CD20 cell surface antigen, a 33-37 kDa non-glycosylated phosphoprotein.

The CD20 antigen is expressed during pre-B-cell development. It is present on both resting and activated B-cells but is lost prior to terminal B-cell differentiation into plasma cells.

The epitope recognized by clone 2H7 has been mapped to the following sequence found in the large extracellular loop of human CD20: YNCEPANPSEKNSPST. Furthermore it appears that *Mouse anti Human CD20 antibody, clone 2H7* only recognizes human CD20 in its native oligomeric form ([Polyak et al. 2002](https://www.bloodjournal.org/article/S0006-2970(02)01723-3/fulltext)).

**Flow Cytometry**

Use 10ul of the suggested working dilution to label 1x 10^6 cells in 100ul

**References**

8. Polyak, M.J. *et al.* (2002) Alanine-170 and proline-172 are critical determinants for extracellular CD20 epitopes; heterogeneity in the fine specificity of CD20 monoclonal antibodies is defined by additional requirements imposed by both amino acid sequence and quaternary structure. *Blood. 1;99*:3256-62.
13. Popov, J. *et al.* (2017) Unique therapeutic properties and preparation methodology of...
Further Reading


Storage

Store at +4°C or at -20°C if preferred. This product should be stored undiluted. This product is photosensitive and should be protected from light. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

Guarantee

18 months from date of despatch.

Acknowledgements

This product is provided under an intellectual property licence from Life Technologies Corporation. The transfer of this product is contingent on the buyer using the purchased product solely in research, excluding contract research or any fee for service research, and the buyer must not sell or otherwise transfer this product or its components for (a) diagnostic, therapeutic or prophylactic purposes; (b) testing, analysis or screening services, or information in return for compensation on a per-test basis; (c) manufacturing or quality assurance or quality control, or (d) resale, whether or not resold for use in research. For information on purchasing a license to this product for purposes other than as described above, contact Life Technologies Corporation, 5791 Van Allen Way, Carlsbad CA 92008 USA or outlicensing@thermofisher.com

Health And Safety Information


Regulatory

For research purposes only

**Related Products**

**Recommended Negative Controls**

MOUSE IgG2b NEGATIVE CONTROL: Pacific Blue® (MCA691PB)

**Recommended Useful Reagents**

HUMAN SEROBLOCK (BUF070A)
HUMAN SEROBLOCK (BUF070B)