Datasheet: MCA1710A647

**Description:** MOUSE ANTI HUMAN CD20: Alexa Fluor® 647

**Specificity:** CD20

**Format:** ALEXA FLUOR® 647

**Product Type:** Monoclonal Antibody

**Clone:** 2H7

**Isotype:** IgG2b

**Quantity:** 100 TESTS/1ml

### Product Details

**RRID** AB_322592

**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>
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<td></td>
<td>Neat - 1/10</td>
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<tr>
<td>Immunofluorescence</td>
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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 Alexa Fluor® 647 - liquid

**Max Ex/Em**

<table>
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<tr>
<th>Fluorophore</th>
<th>Excitation Max (nm)</th>
<th>Emission Max (nm)</th>
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<tbody>
<tr>
<td>Alexa Fluor®647</td>
<td>650</td>
<td>665</td>
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**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
**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).

**Flow Cytometry**

Use 10ul of the suggested working dilution to label 10^6 cells or 100ul whole blood.

**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.
Storage in frost-free freezers is not recommended.
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
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Health And Safety Information
Material Safety Datasheet documentation #10041 available at:

Regulatory
For research purposes only

Related Products
Recommended Negative Controls
MOUSE IgG2b NEGATIVE CONTROL:Alexa Fluor® 647 (MCA691A647)

Recommended Useful Reagents
HUMAN SEROBLOCK (BUF070A)
HUMAN SEROBLOCK (BUF070B)