## Datasheet: MCA4677 BATCH NUMBER 162070

| Description:  | MOUSE ANTI HUMAN FACTOR VIII |
|---------------|------------------------------|
| Specificity:  | FACTOR VIII                  |
| Format:       | Purified                     |
| Product Type: | Monoclonal Antibody          |
| Clone:        | RFF-VIIIC/8                  |
| lsotype:      | lgG1                         |
| Quantity:     | 0.5 mg                       |
|               |                              |

## **Product Details**

| 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 <u>www.bio-rad-antibodies.com/protocols</u> . |     |    |                |                    |  |
|----------------|--|-----|----|----------------|--------------------|--|
|                |  | Yes | No | Not Determined | Suggested Dilution |  |
|                | Flow Cytometry   |     |    | •              |                    |  |
|                | Immunohistology - Frozen   |     |    |                |                    |  |
|                | Immunohistology - Paraffin   |     |    | •              |                    |  |
|                | ELISA  |     |    |                | 1/500 - 1/15000    |  |
|                | Immunoprecipitation  |     |    | •              |                    |  |
|                | Western Blotting   |     |    |                |                    |  |
|                | Radioimmunoassays  |     |    |                |                    |  |
|                | necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.  |     |    |                |                    |  |
| Target Species | Human  |     |    |                |                    |  |
| Species Cross  | Reacts with: Pig   |     |    |                |                    |  |
| Reactivity     | Does not react with:Mouse, Dog, Rat  |     |    |                |                    |  |
|                | <b>N.B.</b> Antibody reactivity and working conditions may vary between species. Cross   |     |    |                |                    |  |
|                | reactivity is derived from testing within our laboratories, peer-reviewed publications or  |     |    |                |                    |  |
|                | personal communications from the originators. Please refer to references indicated for further information.  |     |    |                |                    |  |
| Product Form   | Purified IgG - liquid  |     |    |                |                    |  |

| Preparation                       | Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant   |  |  |
|-----------------------------------|---|--|--|
| Buffer Solution                   | Phosphate buffered saline   |  |  |
| Preservative<br>Stabilisers       | 0.09% Sodium Azide (NaN <sub>3</sub> )  |  |  |
| Carrier Free                      | Yes   |  |  |
| Approx. Protein<br>Concentrations | IgG concentration 1.0mg/ml  |  |  |
| Immunogen                         | Affinity purified human Factor VIII.  |  |  |
| External Database<br>Links        | UniProt:<br><u>P00451</u> <u>Related reagents</u>   |  |  |
|                                   | Entrez Gene:<br><u>2157</u> F8 <u>Related reagents</u>  |  |  |
| Synonyms                          | F8C   |  |  |
| RRID                              | AB_1833762  |  |  |
| Fusion Partners                   | Spleen cells from an immunized Balb/c mouse we fused foth cells of the P3-NS/a-Ag4-1 mouse myeloma.   |  |  |
| Specificity                       | <b>Mouse anti Human Factor VIII antibody, clone RFF-VIIIC/8</b> recognizes human Factor VIII, an essential blood coagulation factor. Whilst circulating in the blood, it is mostly stably complexed to von Willebrand factor. It is activated through cleavage at various sites, dissociates from the complex and interacts with Factor IXa, in the presence of calcium ions and phospholipids, to convert Factor X to the activated Factor Xa, which activates thrombin. Thrombin cleaves fibrinogen into fibrin, which polymerizes and cross-links to form a blood clot. The activated Factor VIII is proteolytically inactivated and cleared from the bloodstream. |  |  |
|                                   | Defects in Factor VIII cause haemophilia A, a disorder characterized by the body's inability to control blood clotting. This could result in severe blood loss, even with minor injuries.   |  |  |
|                                   | Mouse anti Human Factor VIII antibody, clone RFF-VIIIC/8 is a very potent coagulation inhibitor. It recognizes an epitope towards the N-terminus of full-length Factor VIII. It also recognizes the 210 kDa, 90 kDa and 40 kDa cleavage products. Mouse anti Human Factor VIII antibody, clone RFF-VIIIC/8 does not cross-react with von Willebrand factor.   |  |  |
| References                        | <ol> <li>Rotblat, F. <i>et al.</i> (1983) Monoclonal antibodies to human procoagulant factor VIII. <u>J Lab</u><br/><u>Clin Med. 101 (5): 736-46.</u></li> <li>Tiarks, C. <i>et al.</i> (1987) Identification of six functional clotting factor VIII:C epitopes by</li> </ol>   |  |  |

|                                  | analysis of cross-reactive public idiotypes in murine monoclonal VIII:C inhibitors. <u>Thromb</u>  |   |
|----------------------------------|--|---|
|                                  | <ul> <li><u>Res. 45 (5): 527-37.</u></li> <li>3. Purohit, V.S. <i>et al.</i> (2006) Influence of aggregation on immunogenicity of recombinant human Factor VIII in hemophilia A mice. <u>J Pharm Sci. 95 (2): 358-71.</u></li> <li>4. Zaniboni, A. <i>et al.</i> (2015) In vitro differentiation of porcine aortic vascular precursor cells to endothelial and vascular smooth muscle cells. <u>Am J Physiol Cell Physiol. 309 (5):</u> C320-31.</li> <li>5. Turner NA &amp; Moake JL (2015) Factor VIII Is Synthesized in Human Endothelial Cells, Packaged in Weibel-Palade Bodies and Secreted Bound to ULVWF Strings. <u>PLoS One.</u> 10 (10): e0140740.</li> </ul> | i |
| Storage                          | This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.  |   |
|                                  | Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.  |   |
| Guarantee                        | 12 months from date of despatch  |   |
| Health And Safety<br>Information | Material Safety Datasheet documentation #10040 available at:<br>https://www.bio-rad-antibodies.com/SDS/MCA4677<br>10040  |   |
| Regulatory                       | For research purposes only   |   |

## **Related Products**

America

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## **Recommended Secondary Antibodies**

| Rabbit Anti Mouse IgG (STAR12)              | RPE  |
|---|--|
| Goat Anti Mouse IgG IgA IgM (STAR87         | .) <u>HRP</u>  |
| Goat Anti Mouse IgG (STAR76)                | RPE  |
| Goat Anti Mouse IgG (STAR70)                | FITC   |
| Rabbit Anti Mouse IgG (STAR13)              | HRP  |
| Goat Anti Mouse IgG (Fc) (STAR120)          | FITC, HRP  |
| Rabbit Anti Mouse IgG (STAR9)               | <u>FITC</u>  |
| Goat Anti Mouse IgG (STAR77)                | HRP  |
| Goat Anti Mouse IgG (H/L) (STAR117)         | <u>Alk. Phos.</u> , <u>DyLight®488</u> , <u>DyLight®550</u> ,                          |
|   | <u>DyLight®650</u> , <u>DyLight®680</u> , <u>DyLight®800</u> ,                         |
|   | <u>FITC</u> , <u>HRP</u>   |
|   |  |
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To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M384080:210513'

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