

Datasheet: MCA4683

**BATCH NUMBER 0613**

|                      |  |
|----------------------|--|
| <b>Description:</b>  | MOUSE ANTI HUMAN VON WILLEBRAND FACTOR |
| <b>Specificity:</b>  | VON WILLEBRAND FACTOR                  |
| <b>Other names:</b>  | FACTOR VIII RELATED ANTIGEN            |
| <b>Format:</b>       | Purified                               |
| <b>Product Type:</b> | Monoclonal Antibody                    |
| <b>Clone:</b>        | RFF-VIII R/2                           |
| <b>Isotype:</b>      | IgG1                                   |
| <b>Quantity:</b>     | 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 [www.bio-rad-antibodies.com/protocols](http://www.bio-rad-antibodies.com/protocols).

|                              | Yes | No | Not Determined | Suggested Dilution |
|------------------------------|-----|----|----------------|--------------------|
| Flow Cytometry               |     |    | ▪              |                    |
| Immunohistology - Frozen (1) | ▪   |    |                | 1/25 - 1/100       |
| Immunohistology - Paraffin   |     | ▪  |                |                    |
| ELISA                        | ▪   |    |                |                    |
| Immunoprecipitation          |     |    | ▪              |                    |
| Western Blotting             |     | ▪  |                |                    |
| Radioimmunoassays            | ▪   |    |                |                    |
| Protein Purification         | ▪   |    |                |                    |

Where this product 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 product for use in their own system using appropriate negative/positive controls.

**(1)The epitope recognised by this antibody is reported to be sensitive to formaldehyde fixation and tissue processing. Bio-Rad recommends the use of acetone fixation for frozen sections.**

|                       |   |
|-----------------------|---|
| <b>Target Species</b> | Human   |
| <b>Product Form</b>   | Purified IgG - liquid   |
| <b>Preparation</b>    | Purified IgG prepared by affinity chromatography on Protein G from tissue culture |

supernatant

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**Buffer Solution** Phosphate buffered saline

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**Preservative Stabilisers** 0.09% Sodium Azide (NaN<sub>3</sub>)

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**Carrier Free** Yes

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**Approx. Protein Concentrations** IgG concentration 1.0mg/ml

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**Immunogen** Human Factor VIII complex partially purified from Factor VIII concentrate.

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**External Database Links**

**UniProt:**

[P04275](#)

[Related reagents](#)

**Entrez Gene:**

[7450](#)

VWF

[Related reagents](#)

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**Synonyms** F8VWF

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**RRID** AB\_2257334

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**Specificity**

**Mouse anti Human von Willebrand Factor antibody, clone RFF-VIII R/2** recognizes human von Willebrand factor (vWF), also known as Factor VIII related antigen, a blood glycoprotein involved in blood coagulation. It stabilises circulating Factor VIII by binding to it and protecting it from cleavage and delivers it to sites of vascular injury. vWF also promotes the adhesion of platelets to sites of vascular damage by forming a molecular bridge between collagen on exposed endothelial cells and the GPIb binding sites of platelets circulating in the blood. vWF circulates in the blood as large multimers, with each monomer (250 kDa) containing a number of specific domains.

Hereditary or acquired defects in vWF lead to von Willebrand disease (vWD), characterised by varying degrees of susceptibility to bleeding. Symptoms might include nosebleeds, bleeding gums, easy bruising, menorrhagia or gastrointestinal bleeding. Various forms of vWD exist with differing severities, determined by the type of defect.

Clone RF-VIII R/2 has a high affinity for an epitope within the platelet GPIb-binding site that is responsible for biological activity. As such the antibody is a potent inhibitor of vWF activity. It can completely neutralise ristocetin-induced platelet aggregation, platelet binding to the subendothelium and ristocetin-induced binding of vWF to platelets. It also inhibits platelet adhesion to glass beads. The epitope recognized is present only on the intact multimeric form of vWF and is abolished by mild denaturation with SDS. The antibody does not recognize human Factor VIII.

Mouse anti Human von Willebrand Factor antibody, clone RFF-VIII R/2 may be used to detect vWF in immunoassays in combination with clone Mouse anti Human von

Willebrand Factor antibody, clone RFF-VIII R/1 ([MCA4682](#)) as a capture reagent.

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**Histology Positive Control Tissue**

Human tonsil, thymus, liver, spleen or kidney.

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**References**

1. Goodall, A.H. *et al.* (1985) An immunoradiometric assay for human factor VIII/von Willebrand factor (VIII:vWF) using a monoclonal antibody that defines a functional epitope. [Br J Haematol. 59 \(4\): 565-77.](#)
2. Goodall, A.H. & Meyer, D. (1985) Registry of monoclonal antibodies to factor VIII and von Willebrand factor. International Committee on Thrombosis and Haemostasis. [Thromb Haemost. 54 \(4\): 878-91.](#)
3. Chand, S. *et al.* (1986) A two-site, monoclonal antibody-based immunoassay for von Willebrand factor--demonstration that vWF function resides in a conformational epitope. [Thromb Haemost. 55 \(3\): 318-24.](#)
4. Parker, D.N. *et al.* (2016) The functions of the A1A2A3 domains in von Willebrand factor include multimerin 1 binding. [Thromb Haemost. 116 \(1\): 87-95.](#)

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**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. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

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**Guarantee**

12 months from date of despatch

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**Health And Safety Information**

Material Safety Datasheet documentation #10040 available at: <https://www.bio-rad-antibodies.com/SDS/MCA4683>  
10040

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**Regulatory**

For research purposes only

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## Related Products

### Recommended Secondary Antibodies

|   |   |
|---|---|
| Rabbit Anti Mouse IgG (STAR12...)       | <a href="#">RPE</a>   |
| Goat Anti Mouse IgG IgA IgM (STAR87...) | <a href="#">HRP</a>   |
| Goat Anti Mouse IgG (STAR76...)         | <a href="#">RPE</a>   |
| Rabbit Anti Mouse IgG (STAR13...)       | <a href="#">HRP</a>   |
| Goat Anti Mouse IgG (STAR70...)         | <a href="#">FITC</a>  |
| Goat Anti Mouse IgG (H/L) (STAR117...)  | <a href="#">Alk. Phos.</a> , <a href="#">DyLight®488</a> , <a href="#">DyLight®550</a> ,<br><a href="#">DyLight®650</a> , <a href="#">DyLight®680</a> , <a href="#">DyLight®800</a> ,<br><a href="#">FITC</a> , <a href="#">HRP</a> |
| Rabbit Anti Mouse IgG (STAR9...)        | <a href="#">FITC</a>  |
| Goat Anti Mouse IgG (STAR77...)         | <a href="#">HRP</a>   |
| Goat Anti Mouse IgG (Fc) (STAR120...)   | <a href="#">FITC</a> , <a href="#">HRP</a>  |

To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://www.bio-rad-antibodies.com/datasheets)

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