

# Datasheet: BUF041A

Description:	MOUSE SEROBLOCK FcR
Name:	MOUSE SEROBLOCK FCR
Other names:	CD16/CD32
Format:	Reagent
Product Type:	Accessory Reagent
Clone:	FCR4G8
Isotype:	lgG2b
Quantity:	0.1 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 <a href="https://www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	-			

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.

Target Species	Mouse	
Product Form	Purified IgG - liquid	
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 (NaN <sub>3</sub> )	
Approx. Protein Concentrations	IgG concentration 1.0mg/ml	
Immunogen	PU5 1.8 IOE7 Balb/c mouse cell line.	

**Product Information** 

Mouse Seroblock FcR is a rat antibody that recognises mouse CD16 and CD32, cell surface proteins also known as FcRγIII and FcR&gamma:II, respectively. The function of these proteins is to bind IgG molecules via their Fc regions as part of the adaptive immune response. CD16 and/or CD32 are expressed by a wide variety of cells, including monocytes, macrophages, B lymphocytes, granulocytes, NK cells, dendritic cells and some activated T lymphocytes. The expression of CD16/CD32 antigens can lead to non-specific binding of test monoclonal antibodies in staining procedures, resulting in "high background" staining on a wide range of cells. This non-specific

binding may be blocked by pre-incubation of target cells with BUF041A, resulting in clearer staining. For direct analysis of CD16/32 expression this antibody is also available conjugated directly to FITC (MCA2305F), AlexaFluor488 (MCA2305A488), AlexaFluor647 (MCA2305A647) and RPE (MCA2305PE).

#### **Instructions For Use**

In order to reduce Fc-receptor mediated binding of test antibodies the following procedure is

- 1) Incubate the cell suspension (1 x 10<sup>6</sup> cells in 100ul) with 1ug of BUF041A (1ul of undiluted reagent, or 10ul of a 1/10 dilution) for 5-10 minutes.
- 2) Add test antibody according to manufacturers instructions Do not wash BUF041A off the cells. BUF041A is suitable for use in conjunction with test antibodies from any manufacturer or with in-house antibodies.\*
- 3) Proceed with staining as usual.
- \* Care is needed in the design of experiments utilizing unconjugated anti-mouse antibodies, to ensure that the secondary antibody being used does not cross-react with SeroBlock FcR. Bio-Rad supply a range of isotype specific anti-mouse immunoglobulin antibodies that may be useful for this purpose.

#### References

- 1. Ivanovska, N.D et al. (2008) Properdin Deficiency in Murine Models of Nonseptic Shock. The Journal of Immunology. 180: 6962-6969.
- 2. Chen, H-F et al. (2009) A reduced oxygen tension (5%) is not beneficial for maintaining human embryonic stem cells in the undifferentiated state with short splitting intervals. Human Reproduction. 24: 71-80.
- 3. Birjandi, S.Z. et al. (2011) Alterations in marginal zone macrophages and marginal zone B cells in old mice. J Immunol. 186: 3441-51.
- 4. Cousins, F.L. et al. (2016) Evidence for a dynamic role for mononuclear phagocytes during endometrial repair and remodelling. Sci Rep. 6: 36748.

## **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.

# **Shelf Life**

18 months from date of despatch.

## **Health And Safety** Information

Material Safety Datasheet documentation #10040 available at: 10040: https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf

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