

Datasheet: BUF041B

Description:	MOUSE SEROBLOCK FcR
Name:	MOUSE SEROBLOCK FCR
Other names:	CD16/CD32
Format:	Reagent
Product Type:	Accessory Reagent
Clone:	FCR4G8
Isotype:	IgG2b
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.

	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 ₃)
Approx. Protein Concentrations	IgG concentration 1.0mg/ml
Immunogen	PU5 1.8 IOE7 Balb/c mouse cell line

Specificity BUF041B is a rat antibody that recognises mouse CD16 and CD32, cell surface proteins also known as FcRgammalll and FcRgammall, 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 BUF041B, 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](#)), Biotin ([MCA2305B](#)) and RPE ([MCA2305PE](#)).

Instructions For Use In order to reduce Fc-receptor mediated binding of test antibodies the following procedure is recommended:-

1) Incubate the cell suspension (1×10^6 cells in 100ul) with 1ug of BUF041B (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 BUF041B off the cells. BUF041B 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. AbD Serotec 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.](#)

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:

<http://www.abdserotec.com/uploads/MSDS/10040.pdf>

For research purposes only, unless otherwise specified in writing by AbD Serotec.

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Printed on 08 Nov 2011