

An Affymetrix Company

# **Anti-Human CD16 Functional Grade Purified**

Catalog Number: 16-0167

Also known as: Low Affinity IgG Receptor 3, FCGR3a, FCGR3, IGFR3 RUO: For Research Use Only. Not for use in diagnostic procedures.

#### **Product Information**

Contents: Anti-Human CD16 Functional

**Grade Purified** 

REF Catalog Number: 16-0167

**Clone:** B73.1

Concentration: 1 mg/mL

Host/Isotype: Mouse IgG1, kappa



Temperature Limitation: Store at 2-8°C.

**Batch Code:** Refer to vial **Use By:** Refer to vial

## Description

This B73.1 monoclonal antibody reacts with human CD16, a member of the Fc receptor family also known as Fc gamma RIIIa and Fc gamma RIIIb. This 50-65 kDa receptor is expressed on natural killer cells, neutrophils, monocytes, and macrophages. Crosslinking of CD16 in natural killer cells and monocytes results in activation of the MAPK and PI3K signaling pathways, thus regulating the production of TNF alpha, IL-6, and IL-1 beta.

This monoclonal antibody has been shown to block Fc receptor functions.

## **Applications Reported**

This B73.1 antibody has been reported for use in functional blocking assays and flow cytometric analysis.

#### **Applications Tested**

This B73.1 antibody has been tested by flow cytometric analysis of normal human peripheral blood cells. This can be used at less than or equal to 1  $\mu$ g per test. A test is defined as the amount ( $\mu$ g) of antibody that will stain a cell sample in a final volume of 100  $\mu$ L. Cell number should be determined empirically but can range from 10<sup>5</sup> to 10<sup>8</sup> cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

# References

Kramer PR, Winger V, Reuben J. PI3K limits TNF-alpha production in CD16-activated monocytes. Eur J Immunol. 2009 Feb;39(2):561-70.

Trotta R, Kanakaraj P, Perussia B. Fc gamma R-dependent mitogen-activated protein kinase activation in leukocytes: a common signal transduction event necessary for expression of TNF-alpha and early activation genes. J Exp Med. 1996 Sep 1;184(3):1027-35.

Perussia B, Starr S, Abraham S, Fanning V, Trinchieri G. Human natural killer cells analyzed by B73.1, a monoclonal antibody blocking Fc receptor functions. I. Characterization of the lymphocyte subset reactive with B73.1. J Immunol. 1983 May;130(5):2133-41. (B73.1, FC, FA)

Perussia B, Acuto O, Terhorst C, Faust J, Lazarus R, Fanning V, Trinchieri G. Human natural killer cells analyzed by B73.1, a monoclonal antibody blocking Fc receptor functions. II. Studies of B73.1 antibody-antigen interaction on the lymphocyte membrane. J Immunol. 1983 May;130(5):2142-8. (B73.1, FC)

#### **Related Products**

12-4010 F(ab')2 Anti-Mouse IgG PE (polyclonal) 16-4714 Mouse IgG1 K Isotype Control Functional Grade Purified (P3.6.2.8.1)

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