CD16 Monoclonal Antibody (3G8), NovaFluor™ Yellow 730, eBioscience™

Product Details	
Size	100 Tests
Host/Isotype	Mouse / IgG1
Class	Monoclonal
Type	Antibody
Clone	3G8
Conjugate	NovaFluor™ Yellow 730
Excitation/Emission Max	551/730 nm
Form	Liquid
Concentration	4 µL/Test
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_2896584

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	4 µL (0.6 µg)/test	-

Product Specific Information

Description: This 3G8 monoclonal antibody reacts with human and non-human primate CD16, which is also known as the low-affinity Fc gamma RIII. CD16 exists as two distinct isoforms, Fc gamma RIIIA and Fc gamma RIIIB. In humans, Fc gamma RIIIA is expressed as a polypeptide-anchored form on monocytes, macrophages, and lymphocytes such as NK cells. T and B cells do not express this Fc receptor. Fc gamma RIIIB is also detected on neutrophils as a GPI-anchored form. Expression of CD16 on lymphocytes and monocytes is similar in non-human primates. However, while CD16 is not found on neutrophils in macaques and baboons, this receptor is detected on these cells in sooty mangabeys. Binding of IgG leads to activation of signal transduction pathways, resulting in antibody-dependent cell-mediated cytotoxicity (ADCC), phagocytosis, cytokine release, and antigen presentation.

Based on cross-blocking studies 3G8 recognizes the same epitope as CB16. However, 3G8 and B73.1 antibody clones bind distinct epitopes.

Applications Reported: This 3G8 antibody has been reported for use in flow cytometric analysis.

Applications Tested: This 3G8 antibody has been pre-diluted and tested by flow cytometric analysis of normal human peripheral blood cells. This may be used at 4 µL (0.6 µg) per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10^5 to 10^8 cells /test.

NovaFluor dyes are not compatible with DNA intercalating viability dyes. Do not use viability dyes such as propidium iodide, 7-actinomycin D (7-AAD) and DAPI. Invitrogen LIVE/DEAD Fixable Dead Cell stains are recommended for use with NovaFluor dyes.

Each NovaFluor conjugate or kit is shipped with CellBlox Blocking Buffer. Use this buffer whenever staining with NovaFluor conjugates, including single-color compensation controls using cells. Whenever possible, we recommend adding CellBlox Blocking Buffer to antibody cocktails/master mixes prior to combining with cells. Add 5 µL per sample (regardless of the number of NovaFluors in your panel) to use the antibody cocktail as intended. For single-color controls, use 5 µL of CellBlox Blocking Buffer per 100µL of cell sample containing 10^3 to 10^8 cells.

NovaFluor conjugates are based on Phiton™ technology utilizing novel nucleic acid dye structures that allow for engineered fluorescent signatures with consideration for spillover and spread impacts. Learn more

Excitation: 552 nm; Emission: 730 nm; Laser: 561 nm (Yellow) Laser

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