# **cFluor**<sup>®</sup> Technical Data Sheet

# cFluor® BYG575 Anti-Human CD16 (3G8)

PRODUCT DETAILS	
Catalog Number:	R7-20349 (100 tests)
	R7-20350 (25 tests)
Reactivity:	Human, Baboon, Capuchin Monkey, Chimpanzee, Common Marmoset,
	Cynomolgus, Pigtailed Macaque, Rhesus, Sooty Mangabey, Squirrel Monkey
Clone:	3G8
Format:	cFluor® BYG575
Isotype:	Mouse IgG1, κ
Test Dilution:	5 μL / test
Application:	Flow cytometry
Formulation:	Phosphate-buffered saline, pH 7.2, containing 0.09% sodium azide and 0.2%
	BSA (BSA Country of Origin USA)
Storage:	2-8°C and protected from light.
	Do not freeze

#### PRODUCT DESCRIPTION

The 3G8 monoclonal antibody binds to IgG receptor III (FcγRIII) that are in two forms: CD16a ((FcγRIIIA) and CD16b ((FcγRIIIB). With 95% sequence similarity, they are a conventional 50-65 kD polypeptide-anchored transmembrane protein and a 48 kD GPI-anchored protein, respectively. CD16a is expressed on NK cells and macrophages while CD16b is expressed on neutrophils<sup>1,2</sup>. CD16a also plays a crucial role for antibody-dependent cellular cytotoxicity (ADCC) by NK cells<sup>3</sup>. The antibody was conjugated to a fluorophore and purified by chromatography.

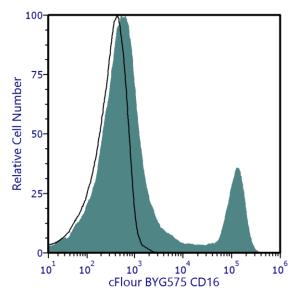
#### **RECOMMENDED USAGE**

Each lot of this antibody is quality control tested using flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is 5  $\mu$ L per 1 million cells in a staining volume of 100  $\mu$ L. If whole blood is analyzed, then use 5  $\mu$ L per 100  $\mu$ L. It is recommended that users titrate the antibody to obtain the optimal result for their specific application.

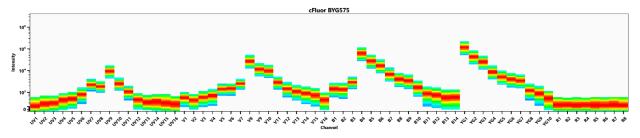
Please briefly centrifuge the reagent vial before use.

Use appropriate personal protective equipment per the product safety data sheet when using this product.

## **PRODUCT DATA**



Human peripheral lymphocytes stained with cFluor® BYG575 CD16 (clone 3G8) (filled histogram) or mouse cFluor® BYG575 lgG1,  $\kappa$  isotype control (open histogram).



Spectral signature of cFluor® BYG575 from a Cytek® Aurora 5 laser system equipped with 355, 405, 488, 561 and 640 nm lasers using CytekAssaySetting.

### **REFERENCES**

- 1. Wirthmueller U, et al. 1992. J Exp Med. 175:1381
- 2. Smed-Sörensen A, et al. 2008. Blood. 111:5037
- 3. Wei H Y, et al, 2016. Sci Rep. 6:34310

For Research Use Only. Not intended for use in diagnostic procedures.