

Catalog Number: FITC-CD16

Basic Information

Catalog Number:
FITC-CD16**Applications:**
IF, FC**Host:**
Alpaca**Conjugate:**
FITC Plus**Type:**

Nanobody

Class:

Recombinant

RRID:

AB_3665974

Molecular Weight:

15.6 kDa

Description

FITC-CD16 is a recombinant FITC Plus conjugated anti CD16 Nanobody (VHH) that targets CD16 in IF and FC applications, showing reactivity with human samples.

Affinity

2 nM for CD16A, 4 nM for CD16B

Excitation/Emission Maxima Wavelengths

500 nm / 520 nm

Background

CD16 is a 50-70-kDa low affinity Fc receptor found on the surface of natural killer cells, neutrophil polymorphonuclear leukocytes, monocytes and macrophages. CD16 mediates antibody-dependent cellular cytotoxicity (ADCC) and other antibody-dependent responses, such as phagocytosis. CD16 has been identified as Fc receptors Fc γ RIIIa (CD16a) and Fc γ RIIIb (CD16b), encoded by two nearly identical genes, FCGR3A and the FCGR3B.

Storage

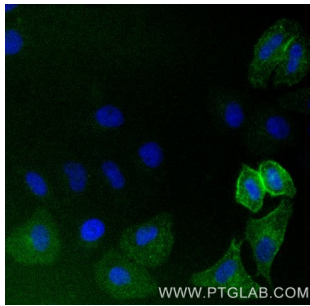
Storage:

Store at -20°C

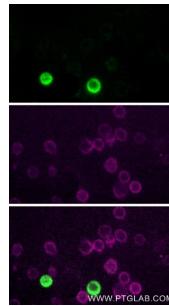
Storage Buffer:

10 mM HEPES pH 7.0, 500 mM NaCl, 5 mM EDTA, 0.09% sodium azide

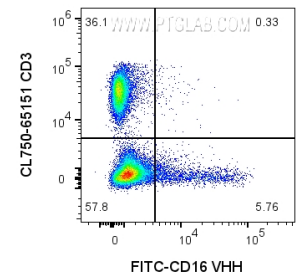
Selected Validation Data



HeLa cells transiently transfected with human CD16 were immunostained with anti-CD16 VHH-FITC (code, 1:500, green). Nuclei were stained with DAPI (blue). Epifluorescence images were acquired with a 20x objective and post-processed. Note: Immunostaining with anti-CD16-VHH-Dye can be performed live or after formaldehyde fixation.



Live human PBMCs were gravity-sedimented and immunostained with anti-CD16 recombinant VHH, FITC Plus (FITC-CD16, green) and anti-CD3 IgG-CL555 (CL555-65151, magenta). Images were acquired with a 20x objective and post-processed. Dead cells (autofluorescent in all channels including UV and far-red) we subtracted from all channels with ImageJ. Note: Immunostaining with FITC-CD16 can be performed live or after formaldehyde fixation.



1×10^6 human PBMCs were surface stained with 0.25 μ g FITC Plus conjugated CD16 VHH (FITC-CD16) and CL750 CD3 (CL750-65151). Cells were not fixed. Cells were treated with FC Receptor Block prior to staining. Lymphocytes and monocytes were gated.