For Research Use Only

anti-CD16 recombinant VHH, CoraLite® Plus 647



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Catalog Number: CL647-CD16

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Type: Nanobody **Applications:** IF, FC Class: Recombinant **Host:** RRID: Alpaca AB_3665404 Conjugate: CoraLite® Plus 647 Molecular Weight: 15.6 kDa

Description

CL647-CD16 is a recombinant CoraLite® Plus 647 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 654 nm / 674 nm

Background

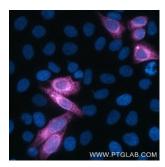
CD16 is a 50-70-kDa low affinity Fc receptor found on the surface of natural killer cells, neutrophil polymorphonuclear leukocytes, monocytes and macrophages. CD16 mediates antibody-dependent cellular cytotoxicity (ADCC) and other antibody-dependent responses, such as phagocytosis. CD16 has been identified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

Storage

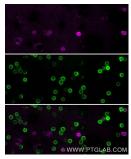
Storage: Store at -20°C

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

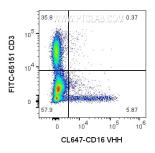
Selected Validation Data



HeLa cells transiently transfected with human CD16 were immunostained with anti-CD16 recombinant VHH, Coralite ® Plus 647 (CL647-CD16, 1:500, magenta). Nuclei were stained with DAPI (blue). Epifluorescence images were acquired with a 20x objective and post-processed. Note: Immunostaining with CL647-CD16 can be performed live or after formaldehyde fixation.



Live human PBMCs were gravity-sedimented and immunostained with anti-CD16 recombinant VHH, CoraLite ® Plus 647 (CL647-CD16, magenta) and anti-CD3 IgG-CL488 (CL488-65151, green). 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 CL647-CD16 can be performed live or after formaldehyde fixation.



1x10^6 human PBMCs were surface stained with 0.25ug CoraLite® Plus 647 conjugated CD16 VHH (CL647-CD16) and FITC CD3 (FITC-65151). Cells were not fixed. Cells were treated with FC Receptor Block prior to staining. Lymphocytes and monocytes were gated.