

For Research Use Only

anti-CTLA4 recombinant VHH, CoraLite® Plus 647



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Catalog Number: CL647-ctl

Basic Information

Catalog Number:
CL647-ctl

Applications:
FC, IF

Host:
Alpaca

Conjugate:
CoraLite® Plus 647

Type:
Nanobody

Class:
Recombinant

RRID:
AB_3101939

Molecular Weight:
14.005 kDa

Description

CL647-ctl targets CTLA4 in FC and IF applications and shows reactivity with Human samples.

Affinity

22 nM

Excitation/Emission Maxima Wavelengths

654 nm / 674 nm

Background

CTLA-4, also known as CD152, belonging to the immunoglobulin superfamily, is primarily found on activated T cells and regulatory T cells (Tregs). CTLA-4 is closely related to the T-cell costimulatory CD28, and both molecules bind to B7-1 and B7-2 on antigen-presenting cells. CTLA-4 acts as a negative regulatory molecule of T-cell responses. Besides the full-length transmembrane form, CTLA-4 also exists in a truncated soluble form (sCTLA-4).

Storage

Storage:
Store at -20°C

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

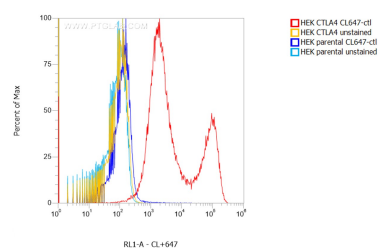
For technical support and original validation data for this product please contact:

T: 4006900926

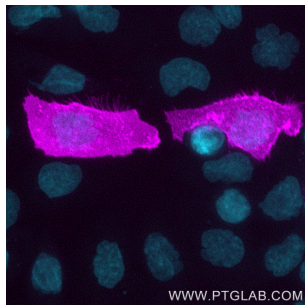
E: Proteintech-CN@ptglab.com
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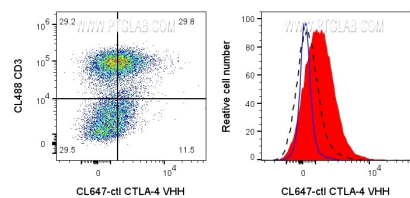
Selected Validation Data



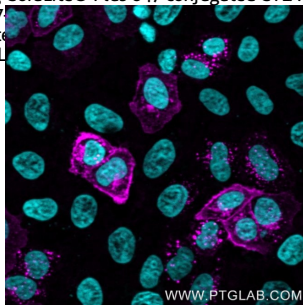
1x10⁶ HEK CTLA4 transient transfected cells (red) and HEK parental cells were surface stained with 0.5 µg CoraLite® Plus 647 conjugated CTLA-4 VHH (CL647-ctl). Cells were not fixed.



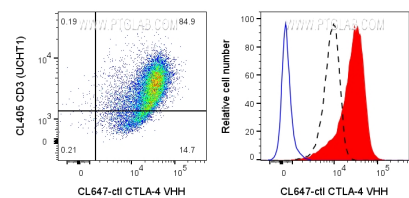
1x10⁶ PHA-treated (3d) human PBMCs were surface stained with CL405 CD3 (CL405-65151) then fixed and permeabilized and stained with 0.5ug CoraLite® Plus 647 conjugated CTLA-4 VHH (CL647-ctl). Right: 1x10⁶ PHA-treated (3d) human PBMCs were fixed and permeabilized then stained with 0.5ug CoraLite® Plus 647 conjugated CTLA-4 VHH (CL647-ctl) (red) or unstained (blue). 1x10⁶ untreated human PBMCs were fixed and permeabilized then stained with 0.5ug CoraLite® Plus 647 conjugated CTLA-4 VHH (CL647-ctl) (black dashed). Cells were treated with FC Receptor Block prior to staining. Cells were fixed and permeabilized using Transcription Factor Staining Buffer Kit (PF00011). Lymphocytes were gated.



Left: 1x10⁶ PHA-treated (3d) human PBMCs were surface stained with 0.25ug CoraLite® Plus 647 conjugated CTLA-4 VHH (CL647-ctl) and CL488 CD3 (CL488-65151). Right: 1x10⁶ PHA-treated (3d) human PBMCs were surface stained with 0.25ug CoraLite® Plus 647 conjugated CTLA-4 VHH (CL647-ctl) (red) or unstained (blue). 1x10⁶ untreated human PBMCs were surface stained with 0.25ug CoraLite® Plus 647 conjugated CTLA-4 VHH (CL647-ctl) (black dashed). Cells were treated with FC Receptor Block prior to staining. Cells were fixed and permeabilized using Transcription Factor Staining Buffer Kit (PF00011). Lymphocytes were gated.



HeLa cells transfected with human CTLA-4 were immunostained with CoraLite® Plus 647 conjugated CTLA-4 VHH (CL647-ctl) (1:500, magenta). Nuclei were stained with DAPI (cyan). Epifluorescence images were acquired with a 40x objective and post-processed. Comment: Immunostaining with CL647-ctl can be performed live or after formaldehyde fixation.



Left: 1x10⁶ PHA-treated (3d) human PBMCs were surface stained with 0.5ug CoraLite® Plus 647 conjugated CTLA-4 VHH (CL647-ctl) and CL405 CD3 (CL405-65151). Right: 1x10⁶ PHA-treated (3d) human PBMCs were surface stained with 0.5ug CoraLite® Plus 647 conjugated CTLA-4 VHH (CL647-ctl) (red) or unstained (blue). 1x10⁶ untreated human PBMCs were surface stained with 0.5ug CoraLite® Plus 647 conjugated CTLA-4 VHH (CL647-ctl) (black dashed). Cells were treated with FC Receptor Block prior to staining. Cells were fixed and permeabilized using Transcription Factor Staining Buffer Kit (PF00011). Lymphocytes were gated.