

For Research Use Only

anti-TIGIT recombinant VHH, CoraLite® Plus 555



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Catalog Number: CL555-tgt

Basic Information

Catalog Number:
CL555-tgt

Applications:
FC, IF

Host:
Alpaca

Conjugate:
CoraLite® Plus 555

Type :
Nanobody

Class:
Recombinant

RRID:
AB_3101925

Molecular Weight:
14.346 kDa

Description

CL555-tgt targets TIGIT in FC and IF applications and shows reactivity with Human samples.

Affinity

Picomolar range, below the assay limit (biolayer interferometry)

Excitation/Emission Maxima Wavelengths

554 nm / 570 nm

Background

TIGIT (T-cell immunoreceptor with Ig and ITIM domains), also known as VSIG9 or VSTM3, is an immune receptor expressed on T cells, including Treg and memory subsets, as well as on NK cells (PMID: 19011627). It contains an immunoglobulin variable domain, a transmembrane domain and an immunoreceptor tyrosine-based inhibitory motif (ITIM). TIGIT binds to poliovirus receptor (PVR, also called CD155) with high affinity, and also to PVRL2 (CD112) with lower affinity. The interaction of TIGIT with PVR on dendritic cells increases the secretion of IL-10 and decreases the secretion of proinflammatory cytokine and suppresses T-cell activation by promoting the generation of mature immunoregulatory dendritic cells. TIGIT can inhibit NK cytotoxicity directly through its ITIM (PMID: 19815499).

Storage

Storage:

Store at -20°C; Shipped at ambient temperature.

Storage Buffer:

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

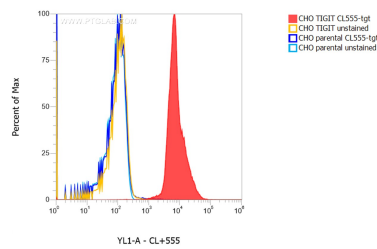
For technical support and original validation data for this product please contact:

T: 4006900926

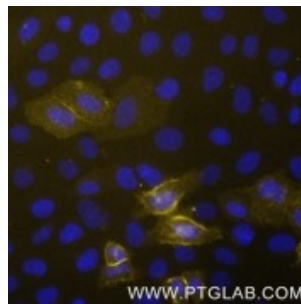
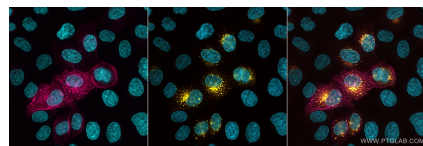
E: Proteintech-CN@ptglab.com
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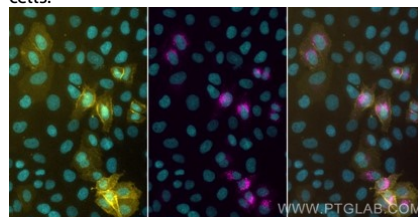
Selected Validation Data



1x10⁶ CHO TIGIT stable expressing cells (red) and CHO parental cells were surface stained with 0.25 µg CoraLite® Plus 555 conjugated-TIGIT VHH (CL555-tgt). Cells were not fixed.

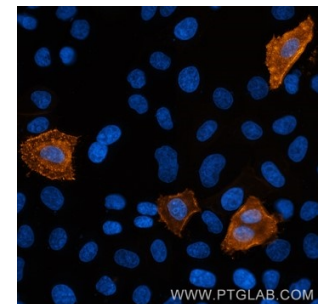


Live HeLa cells transfected with human TIGIT were immunostained with CoraLite® Plus 555 conjugated-TIGIT VHH (CL555-tgt, 1:1000, yellow). Cells were fixed and nuclei were stained with DAPI (blue). Epifluorescence images were acquired with 20x objective and post-processed. Note: Immunostaining with CL555-tgt can also be performed after formaldehyde fixation of the cells.

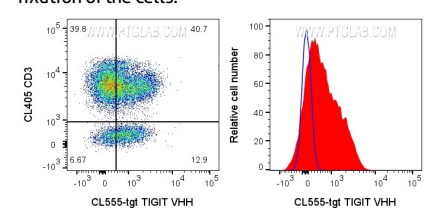


Live HeLa cells transfected with human TIGIT were immunostained with CoraLite® Plus 647 conjugated-TIGIT VHH (CL647-tgt, 1:1000, magenta). After formaldehyde fixation, triton permeabilization and blocking with BSA, the intracellular pool of TIGIT was immunostained with CoraLite® Plus 555 conjugated-TIGIT VHH (CL555-tgt, 1:1000, yellow). Cell nuclei were stained with DAPI (cyan). Epifluorescence images were acquired and post-processed with Leica Thunder Imager, 40x objective.

Live HeLa cells transfected with human TIGIT were immunostained with CoraLite® Plus 555 conjugated-TIGIT VHH (CL555-tgt, 1:1000, yellow). After formaldehyde fixation, triton permeabilization and blocking with BSA, the intracellular pool of TIGIT was immunostained with CoraLite® Plus 647 conjugated-TIGIT VHH (CL647-tgt, 1:1000, magenta). Cell nuclei were stained with DAPI (cyan). Epifluorescence images were acquired with a 20x objective and post-processed.



Live HeLa cells transfected with human TIGIT were immunostained with CoraLite® Plus 555 conjugated-TIGIT VHH (CL555-tgt, 1:1000, orange). Cells were fixed and nuclei were stained with DAPI (blue). Epifluorescence images were acquired and post-processed with Leica Thunder Imager, 40x objective. Note: Immunostaining with CL555-tgt can also be performed after formaldehyde fixation of the cells.



Left: 1x10⁶ human PBMCs were surface stained with 1 µg CoraLite® Plus 555 conjugated TIGIT VHH (CL555-tgt) and CL405 CD3 (CL405-65151). Right: 1x10⁶ human PBMCs were surface stained with 1 µg CoraLite® Plus 555 conjugated TIGIT VHH (CL555-tgt) (red) or unstained (blue). Cells were not fixed. Lymphocytes were gated.