

For Research Use Only

# anti-TIGIT recombinant VHH, CoraLite® Plus 647



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Catalog Number: CL647-tgt

## Basic Information

**Catalog Number:**  
CL647-tgt

**Applications:**  
FC, IF

**Host:**  
Alpaca

**Conjugate:**  
CoraLite® Plus 647

**Type :**  
Nanobody

**Class:**  
Recombinant

**RRID:**  
AB\_3101926

**Molecular Weight:**  
14.346 kDa

## Description

CL647-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

654 nm / 674 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:

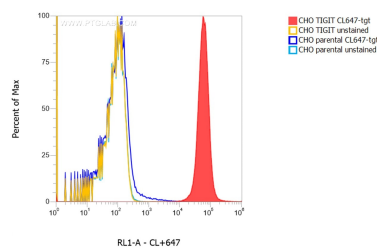
500 mM NaCl, 10 mM HEPES pH 7.0, 5 mM EDTA, 0.09% sodium azide

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

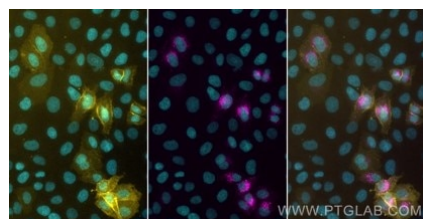
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or E: proteintech@ptglab.com  
1(312) 455-8498 (outside USA) W: www.ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

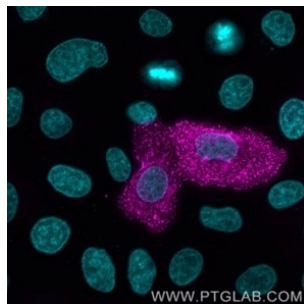
## Selected Validation Data



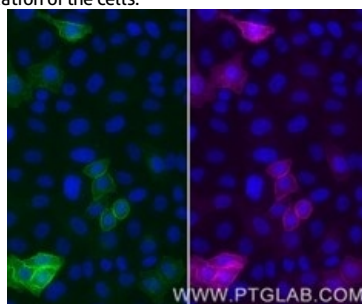
1x10<sup>6</sup> CHO TIGIT stable expressing cells (red) and CHO parental cells were surface stained with 0.25 µg CoraLite® Plus 647 conjugated-TIGIT VHH (CL647-tgt). Cells were not fixed.



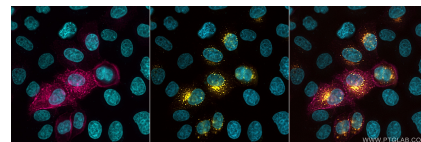
Live HeLa cells transfected with human TIGIT were immunostained with CoraLite® Plus 555 conjugated-TIGIT VHH (CL555-tgt, 1:1000, yellow). After formaldehyde fixation, triton permeabilization and blocking with BSA, the intracellular pool of TIGIT was immunostained with CoraLite® Plus 647 conjugated-TIGIT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



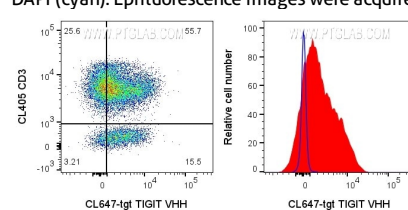
Live HeLa cells transfected with human TIGIT were immunostained with CoraLite® Plus 647 conjugated-TIGIT VHH (CL647-tgt, 1:1000, magenta). Cells were fixed and nuclei were stained with DAPI (cyan). Epifluorescence images were acquired and post-processed with Leica Thunder Imager, 40x objective. Note: Immunostaining with CL647-tgt can also be performed after formaldehyde fixation of the cells.



Live HeLa cells transfected with human TIGIT were probed with human recombinant anti-TIGIT IgG. After formaldehyde fixation, the cells were immunostained with CoraLite® Plus 647 conjugated-TIGIT VHH (CL647-tgt, 1:1000, magenta) and with anti-human IgG Nano-Secondary (shuGCL488-2, green). Cell nuclei were stained with DAPI (blue). Epifluorescence images were acquired with 20x objective and post-processed.



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



Left: 1x10<sup>6</sup> human PBMCs were surface stained with 1 µg CoraLite® Plus 647 conjugated TIGIT VHH (CL647-tgt) and CL405 CD3 (CL405-65151). Right: 1x10<sup>6</sup> human PBMCs were surface stained with 1 µg CoraLite® Plus 647 conjugated TIGIT VHH (CL647-tgt) (red) or unstained (blue). Cells were not fixed. Lymphocytes were gated.