

Catalog Number: FITC-tgt

Basic Information

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

Nanobody

Class:

Recombinant

RRID:

AB_3101927

Molecular Weight:

14.346 kDa

Description

FITC-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

495 nm / 524 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

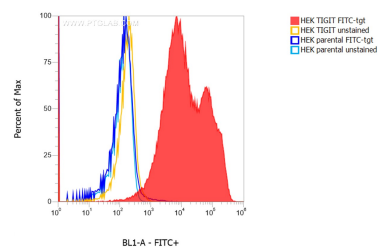
Storage:

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

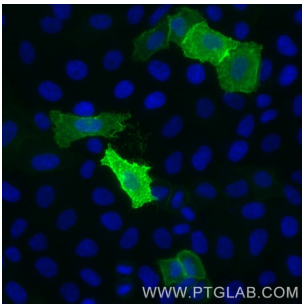
Storage Buffer:

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

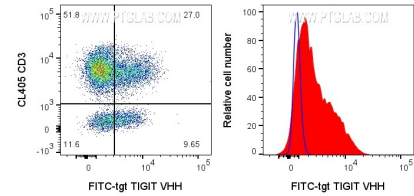
Selected Validation Data



1x10⁶ HEK TIGIT transiently transfected cells (red) and HEK parental cells were surface stained with 0.25 µg FITC Plus conjugated-TIGIT VHH (FITC-tgt). Cells were not fixed.



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



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