

anti-TIGIT recombinant VHH, for 2x Cys conjugation

Catalog Number: **tgtCys2**

Basic Information

Catalog Number:
tgtCys2**Applications:**
Conjugation**Host:**
Alpaca**Conjugate:**
Unconjugated**Type :**

Nanobody

Class:

Recombinant

RRID:

AB_3101924

Molecular Weight:

14.346 kDa

Description

Alpaca anti-TIGIT VHH, purified recombinant binding protein. Suitable for for cysteine conjugation with thiol-reactive reagents, e.g. maleimides. Note: unconjugated VHHs are not suited for usage without prior labeling, since they contain reactive Cysteines. Shipment and storage buffers contain TCEP to keep Cysteins reduced.

Affinity

in the picomolar range, below the assay limit (biolayer interferometry)

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

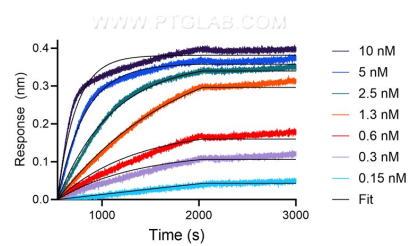
Storage:

Store at -20°C; Avoid exposure to light. Shipped at dry ice.

Storage Buffer:

10 mM HEPES, 500 mM NaCl, pH 7.0, 1 mM TCEP, 0.09% sodium azide

Selected Validation Data



The affinity of anti-human TIGIT recombinant VHH towards human TIGIT was determined using biolayer interferometry (BLI). Biotinylated, recombinant human TIGIT was immobilized on Streptavidin biosensors and assayed with 0.15 to 10 nM of CoraLite® Plus 647-conjugated TIGIT VHH (CL647-tgt). Fit indicates a 1:1 binding model fitted to the data.