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## anti-TIGIT recombinant VHH, for 2x Cys conjugation



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Catalog Number: tgtCys2

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**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

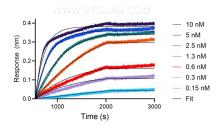
TIGIT (T-cell immunoreceptor with Ig and ITIM domains), also known as VSIG9 or VSTM3, is an immune receptor expressed on T cells, including Treg and memory subsets, as well as on NK cells (PMID: 19011627). It contains an immunoglobulin variable domain, a transmembrane domain and an immunoreceptor tyrosine-based 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.