For Research Use Only

anti-FLT3 recombinant VHH, for 2x Cys conjugation

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Catalog Number: fltCys2

Basic Information

Catalog Number:
fltCys2

Applications:
Conjugation

Host:
Alpaca

Conjugate:
Unconjugated

Type:
Nanobody

Class:
Recombinant

RRID:
AB_3101944

Molecular Weight:
15.433 kDa

Description

Alpaca anti-FLT3 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

Picomolar range, below the assay limit (biolayer interferometry)

Background

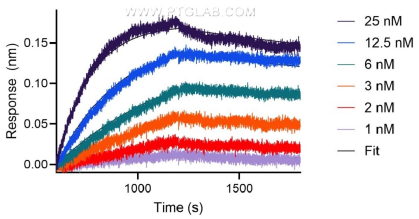
FLT3 (also known as CD135 or FLK2) is a tyrosine-protein kinase that acts as a cell-surface receptor for the cytokine FLT3LG and regulates differentiation, proliferation, and survival of hematopoietic progenitor cells and of dendritic cells. FLT3 was originally identified by its expression in hematopoietic stem/progenitor cells (PMID: 7507245). It is important for the normal development of hematopoietic stem/progenitor cells. Mutations that result in the constitutive activation of this receptor result in acute myeloid leukemia and acute lymphoblastic leukemia.

Storage

Storage:
Store at -20°C

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 FLT3 recombinant VHH towards human FLT3 was determined using biolayer interferometry (BLI). Biotinylated, recombinant human FLT3 was immobilized on Streptavidin biosensors and assayed with 1.5 to 100 nM of FITC Plus conjugated-FLT3 VHH (FITC-flt). Fit indicates a 1:1 binding model fitted to the data.