

# Nano-Secondary® alpaca anti-mouse IgG1, recombinant VHH, CoraLite® Plus 488 [CTK0103, CTK0104]

Product code: smsG1CL488-1

## Properties

<b>Description</b>	Monovalent, recombinant secondary single domain antibody to mouse IgG1: Mixture of 2 alpaca monoclonal Nanobodies, Fc-specific, CoraLite® Plus 488 conjugated
<b>Product type</b>	Nano-Secondary® Reagent, secondary Nanobody (VHH)
<b>Format</b>	Alpaca single domain antibody, monovalent
<b>Host</b>	Alpaca-derived, recombinantly produced in bacteria
<b>Target/Specificity</b>	Fc-fragment of mouse IgG1
<b>Cross-reactivity</b>	No cross-reactivity to goat, guinea pig, human, macaque, rabbit, rat, and sheep serum and to mouse IgG2a, IgG2b, IgG2c, IgG3, and IgM
<b>Immunogen</b>	Purified mouse IgG1
<b>Clonality</b>	Biclonal: mixture of 2 monoclonal Nanobodies
<b>Clones</b>	CTK0103 (VHH0302), CTK104 (VHH0305)
<b>Affinity (Kd)</b>	CTK0103: KD = 0.13 nM, CTK104: KD = 0.63 nM
<b>Conjugate</b>	CoraLite® Plus 488
<b>Excitation / Emission</b>	Excitation max: 490 nm, Emission max: 525 nm
<b>Degree of labeling (DOL)</b>	2 fluorophores per Nanobody
<b>Synonyms</b>	Alpaca single domain antibody, VHH, Nanobody, binding domain of single domain antibody, Nano-antibody
<b>Validation</b>	Application validated for immunofluorescence and western blotting. Determination of cross-reactivity, sequence, affinity, melting point, and degree of labeling (DOL).
<b>Purity</b>	Recombinantly expressed and purified
<b>Form</b>	Buffered aqueous solution
<b>Concentration</b>	0.5 mg/mL
<b>Storage buffer</b>	10 mM HEPES pH 7.0, 500 mM NaCl, 5 mM EDTA Preservative: 0.09 % sodium azide, safety datasheet (SDS): sodium azide
<b>Storage instructions</b>	Shipped at ambient temperature. Store at +4°C short term or -20°C long term. Stable for 1 year at -20°C.
<b>Size</b>	10 µL; 100 µL
<b>RRID</b>	AB_2941310

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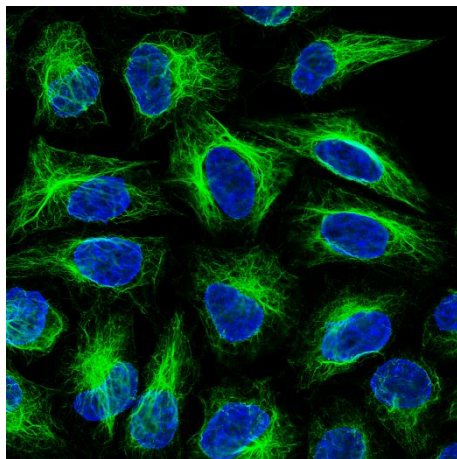
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## Applications

Immunofluorescence: recommended starting dilution 1:500.  
 Western blot: recommended starting dilution 1:500.  
 The optimal dilution should be determined by the user. A titration range is recommended.

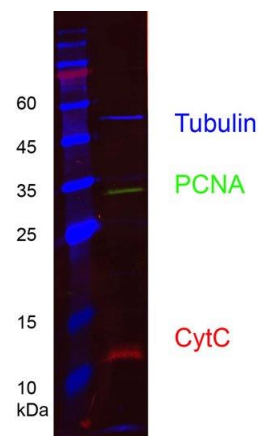
## Tested applications

### Immunofluorescence



Immunofluorescence analysis of HeLa cells stained with mouse IgG1 anti-Vimentin antibody and Nano-Secondary® alpaca anti-mouse IgG1, recombinant VHH, CoraLite® Plus 488 (smsG1CL488-1, green). Nuclei were stained with DAPI (blue). Images were recorded at the Core Facility Bioimaging at the Biomedical Center, LMU Munich.

### Western blot



HEK-293 cell lysates were subjected to SDS-PAGE followed by multiplex western blot analysis with 3 mouse primary antibodies including anti-PCNA (60097-1-Ig), anti-cytochrome C (66264-1-Ig), and anti-alpha tubulin (66031-1-Ig). Primary antibodies were detected using 3 mouse IgG subclass-specific nano-secondary reagents including Nano-Secondary® alpaca anti-mouse IgG1, recombinant VHH, CoraLite® Plus 488 (smsG1CL488-1, green), Nano-Secondary® alpaca anti-mouse IgG2a, recombinant VHH, CoraLite® Plus 555 (smsG2aCL555-1, red), and Nano-Secondary® alpaca anti-mouse IgG2b, recombinant VHH, CoraLite® Plus 647 (smsG2bCL647-1, blue).

Only for research applications, not for diagnostic or therapeutic use.

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