

Nano-Secondary[®] alpaca anti-mouse IgG1, recombinant VHH, Alexa Fluor[®] 647 [CTK0103, CTK0104]



Product code: sms1AF647-1

Properties

Description	Monovalent, recombinant secondary single domain antibodies to mouse IgG1: Mixture of 2 alpaca monoclonal Nanobodies, Fc-specific, Alexa Fluor [®] 647 conjugated
Product Type	Nano-Secondary [®] , secondary Nanobody (VHH)
Format	Alpaca single domain antibody, monovalent
Host	Alpaca-derived, recombinantly produced in bacteria
Target / Specificity	Fc-fragment of mouse IgG1
Cross-reactivity	No cross-reactivity to goat, guinea pig, human, macaque, rabbit, rat, and sheep serum and to mouse IgG2a, IgG2b, IgG2c, and IgG3
Immunogen	Purified mouse IgG1
Clonality	Biclonal: mixture of 2 monoclonal Nanobodies
Clones	CTK0103, CTK0104 (VHH0302, VHH0305)
Affinity (Kd)	CTK0103: Kd = 0.1 nM, CTK0104: Kd = 0.6 nM
Conjugate	Site-directed conjugation to Alexa Fluor 647
Excitation/ Emission	Excitation max: 650 nm, Emission max: 665 nm
Degree of Labeling (DOL)	2 fluorophores per Nanobody
Synonyms	Alpaca single domain antibody, VHH, Nanobody, binding domain of single domain antibody, Nano-antibody
Validation	Application validated for immunofluorescence and Western blotting Determination of cross-reactivity, sequence, affinity, melting point, and degree of labeling (DOL)
Purity	Recombinantly expressed and purified
Form	Buffered aqueous solution
Concentration	00.5 mg/mL
Storage buffer	10 mM HEPES pH 7.0, 500 mM NaCl, 5 mM EDTA Preservative: 0.09 % sodium azide, safety datasheet (SDS): sodium azide
Storage instructions	Shipped at ambient temperature. Store at -20°C/-4°F. Avoid freeze-thaw cycles. Aliquot upon arrival. Protect from light. Stable for 6 months.
Size	10 µL; 100 µL
RRID	AB_2827580

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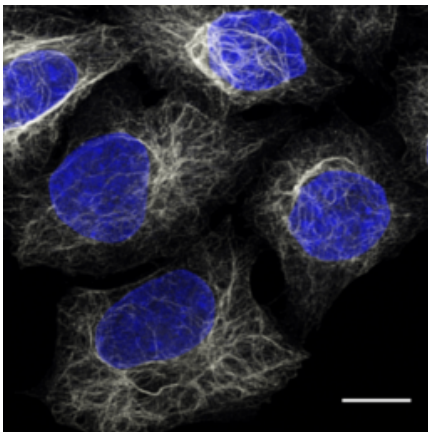


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Applications	Spin down material before use! IF/ICC: recommended starting dilution 1:500 (e.g. PBS supplemented with 4% BSA) Western blot: recommended starting dilution 1:1,000 (e.g. PBS supplemented with 0.075% Tween-20 and 5% skimmed milk) <i>Note:</i> The optimal dilution depends on the application and should be determined by the user. A titration from range from 1:250 up to 1:2,000 is recommended. <i>Note:</i> Image acquisition time may have to be optimized.
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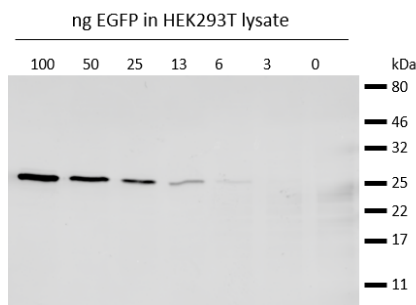
Tested Applications

Immunofluorescence



Immunostaining of Vimentin in HeLa cells with mouse anti-Vimentin antibody and Nano-Secondary[®] alpaca anti-mouse IgG1, recombinant VHH, Alexa Fluor[®] 647 [CTK0103, CTK0104] 1:500 (gray). Nuclei were stained with DAPI (blue). Scale bar, 10 μ m.

Western Blot



Western blot analysis of EGFP (EGFP-250, ChromoTek) added to HEK293T cell lysate. Detection with mouse anti-GFP antibody and Nano-Secondary[®] alpaca anti-mouse IgG1, recombinant VHH, Alexa Fluor[®] 647 [CTK0103, CTK0104] 1:1,000.

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Product overview and related products

Nano-Secondaries (Alexa Fluor® conjugated)	Product code
Nano-Secondary® alpaca anti-human IgG/anti-rabbit IgG, recombinant VHH, Alexa Fluor® 488 [CTK0101, CTK0102]	srbAF488-1-10; -100
Nano-Secondary® alpaca anti-human IgG/anti-rabbit IgG, recombinant VHH, Alexa Fluor® 568 [CTK0101, CTK0102]	srbAF568-1-10; -100
Nano-Secondary® alpaca anti-human IgG/anti-rabbit IgG, recombinant VHH, Alexa Fluor® 647 [CTK0101, CTK0102]	srbAF647-1-10; -100
Nano-Secondary® alpaca anti-mouse IgG1, recombinant VHH, Alexa Fluor® 488 [CTK0103, CTK0104]	sms1AF488-1-10; -100
Nano-Secondary® alpaca anti-mouse IgG1, recombinant VHH, Alexa Fluor® 568 [CTK0103, CTK0104]	sms1AF568-1-10; -100
Nano-Secondary® alpaca anti-mouse IgG1, recombinant VHH, Alexa Fluor® 647 [CTK0103, CTK0104]	sms1AF647-1-10; -100
Nano-Secondary® alpaca anti-mouse IgG2b, recombinant VHH, Alexa Fluor® 488 [CTK0105, CTK0106]	sms2bAF488-1-10; -100
Nano-Secondary® alpaca anti-mouse IgG2b, recombinant VHH, Alexa Fluor® 568 [CTK0105, CTK0106]	sms2bAF568-1-10; -100
Nano-Secondary® alpaca anti-mouse IgG2b, recombinant VHH, Alexa Fluor® 647 [CTK0105, CTK0106]	sms2bAF647-1-10; -100
Nano-Secondary® alpaca anti-mouse IgG3, recombinant VHH, Alexa Fluor® 647 [CTK0107]	sms3AF647-1-10; -100
Nano-Secondaries (unconjugated)	
Nano-Secondary® alpaca anti-human IgG/anti-rabbit IgG, recombinant VHH, for 2x Cys conjugation [CTK0101]	srbGCys2-1-500
Nano-Secondary® alpaca anti-rabbit IgG, recombinant VHH, for 2x Cys conjugation [CTK0102]	srbGCys2-2-500
Nano-Secondary® alpaca anti-mouse IgG1, recombinant VHH, for 2x Cys conjugation [CTK0103]	smsG1Cys2-1-500
Nano-Secondary® alpaca anti-mouse IgG1, recombinant VHH, for 2x Cys conjugation [CTK0104]	smsG1Cys2-2-500
Nano-Secondary® alpaca anti-mouse IgG2b, recombinant VHH, for 2x Cys conjugation [CTK0105]	smsG2bCys2-1-500
Nano-Secondary® alpaca anti-mouse IgG2b, recombinant VHH, for 2x Cys conjugation [CTK0106]	smsG2bCys2-2-500

For product details, information, and ordering visit www.chromotek.com.

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