

For Research Use Only

Nano-Secondary® anti-mouse IgG1, recombinant VHH, Alexa Fluor® 488 [CTK0103, CTK0104]

Catalog Number: sms1AF488-1

8 Publications



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Basic Information

Catalog Number:

sms1AF488-1

Applications:

IF, WB, FC

Host:

Alpaca

Conjugate:

Alexa Fluor® 488

Type:

Mixture of 2 monoclonal Nanobodies;
Secondary Nanobody

Class:

Recombinant

RRID:

AB_2827579

Purification Method:

Recombinant expression, affinity purification
IMAC

Description

Nano-Secondary® anti-mouse IgG1, Fc-specific recombinant VHH reagent uses a novel class of anti-mouse IgG isotype specific antibodies. This secondary antibody product consists of Nanobodies that bind to mouse IgG1 with high affinity & specificity.

Species Reactivity

Mouse IgG1 Fc-fragment

No cross-reactivity: goat, guinea pig, rabbit, rat, sheep, human, macaque serum proteins, mouse IgG2a, IgG2b, IgG2c, IgG3

Physical State

Liquid

Suggested Dilution

Immunofluorescence 1:500

Super-resolution microscopy 1:500

Western blot 1:1,000

Affinity (K_D)

CTK0103: K_D = 0.13 nM, CTK0104: K_D = 0.63 nM

Storage

Storage:

Store at -20°C short term or -80°C long term. Aliquot upon delivery. Avoid freeze-thaw cycles.

Storage Buffer:

10 mM HEPES pH 7.0, 500 mM NaCl, 5 mM EDTA, Preservative: 0.09 % Sodium azide

For technical support and original validation data for this product please contact:

T: 4006900926

E: Proteintech-CN@ptglab.com

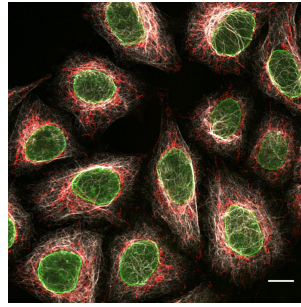
W: www.ptgcn.com

This product is exclusively available under
Proteintech Group brand and is not available
to purchase from any other manufacturer.

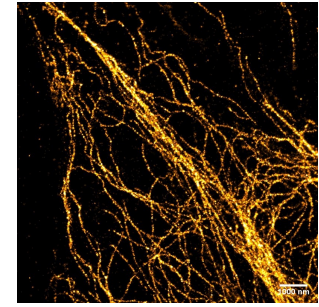
Selected Validation Data



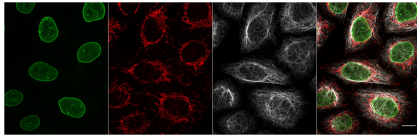
Anti-mouse IgG1 Nano-Secondary: Well-defined and characterized immunostaining. Primary anti-mouse IgG1 antibody (grey) with 2X2 monoclonal mouse Fc- specific Nanobodies (green) bound. In total, 8 fluorophores (red stars) label the mouse IgG1 primary antibody.



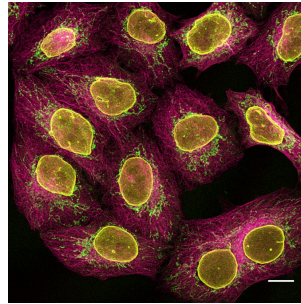
The anti-mouse IgG1 Nano-Secondary is subclass-specific and does not cross-react with IgGs from other commonly used species (here rabbit) and with mouse IgG2b and IgG3 subclasses.



Vimentin in HeLa cells: The cells were stained with monoclonal anti-Vimentin mouse IgG1 antibody and alpaca anti-mouse IgG1 VHH Alexa Fluor® 488 and recorded with Leica GSDIM system. The image is a courtesy of Dr. Leila Nahidiazar, Dr. Jop Kind, and Prof. Kees Jalink.



One-step immunostaining is the simultaneous incubation of mouse IgG1 primary antibody and anti-mouse IgG1 Nano-Secondary. This method reduces incubation and hands-on time. Simultaneous incubation also supports multiplexing, tissue penetration, and cell staining for flow cytometry.



Multiplexed immunostaining of HeLa cells with two alpaca anti-mouse Nano-Secondaries and one anti-rabbit Nano-Secondary. Green: mouse IgG1 anti-COX4 + alpaca anti-mouse IgG1 VHH Alexa Fluor 488. Magenta: mouse IgG2b anti-Tubulin + alpaca anti-mouse IgG2b VHH Alexa Fluor 647. Yellow: rabbit anti-Lamin + alpaca anti-rabbit IgG VHH Alexa Fluor 568. Scale bar, 10 μ m. Images were recorded at the Core Facility Bioimaging at the Biomedical Center, LMU Munich.