For Research Use Only

Nano-Secondary® anti-mouse IgG3, recombinant VHH, Alexa Fluor® 647 [CTK0107]

Catalog Number: sms3AF647-1

www.ptglab.com

Basic Information

Catalog Number:
sms3AF647-1

Applications:
IF, WB

Host:
Alpaca

Conjugate:
Alexa Fluor® 647

Type:
Nanobody

Class:
Recombinant

RRID:
AB_2827584

Purification Method:
Recombinant expression, affinity purification IMAC

Description

Nano-Secondary® anti-mouse IgG3, Fab-specific recombinant VHH is an anti-mouse IgG subclass specific antibody. This secondary antibody product consists of a Nanobody that binds to mouse IgG3 with high affinity & specificity.

Species Reactivity

Mouse IgG3 Fc-fragment
No cross-reactivity: goat, guinea pig, rabbit, rat, sheep, human, macaque serum proteins, mouse IgG1, IgG2a, IgG2b, IgG2c

Physical State

Liquid

Suggested Dilution

Immunofluorescence 1:1,000
Western blot 1:1,000

Affinity (K_D)

CTK0107: K_D = 5.7 nM

Storage

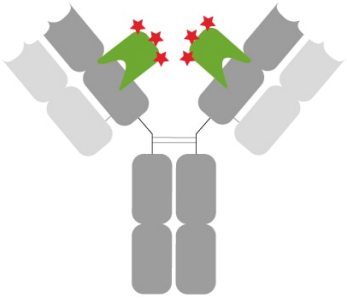
Storage:
Store at -20°C short term or -80°C long term. Aliquot upon delivery. Avoid freeze-thaw cycles.

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

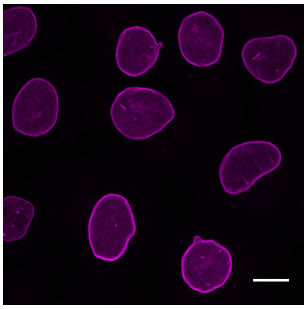
For technical support and original validation data for this product please contact
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or E: proteintech@ptglab.com
1(312) 455-8498 (outside USA) W: www.ptglab.com

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

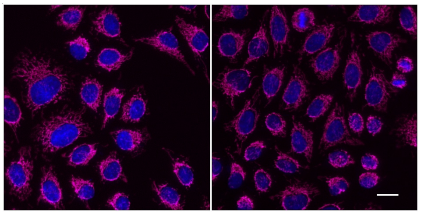
Selected Validation Data



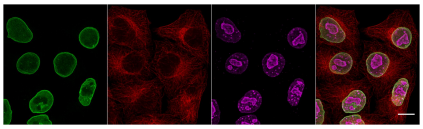
Anti-mouse IgG3 Nano-Secondary: Well-defined and characterized immunostaining. Primary anti-mouse IgG3 antibody (grey) with 2 copies of a monoclonal mouse Fab- specific Nanobody (green) bound. In total, 6 fluorophores (red stars) label the mouse IgG3 primary antibody.



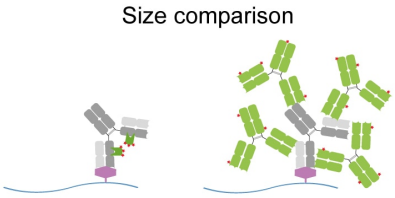
HeLa cells were immunostained with mouse IgG3 anti-Lamin A/C antibody + alpaca anti-mouse IgG3 VHH Alexa Fluor® 647 (magenta). Scale bar, 10 µm. Images were recorded at the Core Facility Bioimaging at the Biomedical Center, LMU Munich.



One-step staining (left) vs. sequential staining (right) of HeLa cells with anti-MOT (mitochondria) mouse IgG3 monoclonal primary antibody + alpaca anti-mouse IgG3 VHH Alexa Fluor® 647 (magenta). Cell nuclei are stained with DAPI (blue). Scale bar, 20 µm.



Multiplexed immunostaining of HeLa cells with two alpaca anti-mouse Nano-Secondaries and one conventional secondary antibody. Green: mouse IgG3 anti-Lamin + alpaca anti-mouse IgG3 VHH Alexa Fluor® 488. Red: mouse IgG1 anti-Tubulin + alpaca anti-mouse gG1 VHH Alexa Fluor® 568. Magenta: rabbit anti-Ki67 + conventional polyclonal secondary anti-rabbit-AF647. Scale bar, 10 µm. Images were recorded at the Core Facility Bioimaging at the Biomedical Center, LMU Munich.



Higher resolution with anti-mouse IgG3 Nano-Secondary compared to conventional secondary antibodies. Left: Formation of a small, precise complex of Nanobodies (green) & primary antibody (grey). Right: Formation of a large, arbitrary complex of multiple polyclonal secondaries (green) & primary antibody.