

For Research Use Only

Nano-Secondary® anti-human IgG/anti-rabbit IgG, recombinant VHH, Alexa Fluor® 647 [CTK0101, CTK0102]

Catalog Number: **srbAF647-1**

3 Publications



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Basic Information

Catalog Number:

srbAF647-1

Applications:

IF, WB, FC

Host:

Alpaca

Conjugate:

Alexa Fluor® 647

Type:

Mixture of 2 monoclonal Nanobodies;
Secondary Nanobody

Class:

Recombinant

RRID:

AB_2827587

Purification Method:

Recombinant expression, affinity purification
IMAC

Description

Nano-Secondary® anti-human IgG/anti-rabbit IgG, recombinant VHH is an anti-human IgG and anti-rabbit IgG specific secondary antibody. It consists of a mixture of 2 Nanobodies that bind to human IgG and rabbit IgG with high affinity & specificity.

Species Reactivity

Rabbit, Human, Macaque

No cross-reactivity to mouse, rat, sheep, goat, and guinea pig IgG

Physical State

Liquid

Suggested Dilution

Immunofluorescence 1:1,000

Super-resolution microscopy 1:1,000

Western blot 1:1,000

Affinity (K_D)

CTK0101: $K_D = 0.2$ nM, CTK0102: $K_D = 1.2$ 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:

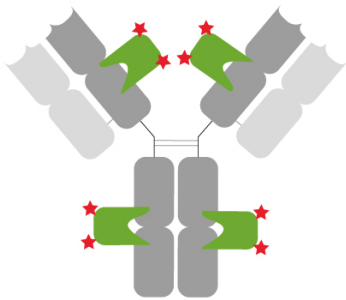
T: 4006900926

E: Proteintech-CN@ptglab.com

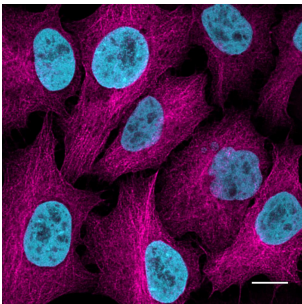
W: www.ptgcn.com

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

Selected Validation Data

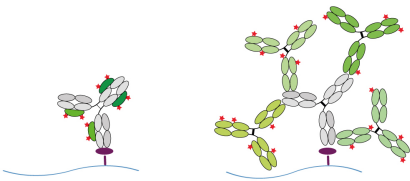


Well-defined and characterized immunostaining: Primary anti-rabbit IgG antibody (grey) with 2 copies each of a rabbit Fab- and Fc-specific monoclonal Nanobodies (green) bound. In total, 8 fluorophores (red stars) label the primary rabbit IgG antibody.



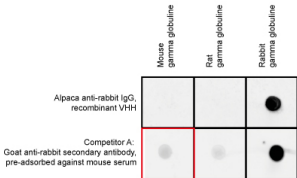
HeLa cells stably expressing Tubulin-GFP at near-endogenous level were immunostained with rabbit anti-GFP PABG1 antibody and alpaca anti-rabbit IgG VHH Alexa Fluor® 647 (magenta). Nuclei were detected with H2B-RFP and RFP-Booster Atto594 (cyan). Scale bar, 10 μ m. Images were recorded at the Core Facility Bioimaging at the Biomedical Center, LMU Munich.

Size comparison

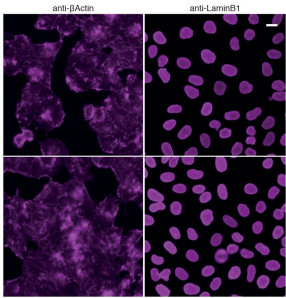


Higher resolution with anti-rabbit IgG Nano-Secondaries compared to conventional secondary antibodies: Left: Formation of a small, precise complex of Nanobodies (green) & primary antibody (grey). Right: Formation of a large, arbitrary complex of multiple polyclonal secondaries (green) & primary rabbit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

High specificity



HeLa cells were immunostained with rabbit anti-Lamin B1 antibodies and alpaca anti-rabbit IgG VHH Alexa Fluor® 568 (1:1,000). Confocal and gated STED images were acquired with a Leica TCS SP8 STED 3X microscope, pulsed depletion with a 775 nm laser. Images were recorded at the Core Facility Bioimaging at the Biomedical Center, LMU Munich.



One-step immunostaining (top row) vs. sequential immunostaining (bottom row) of HeLa cells. Anti- β -Actin (left column) and anti-LaminB1 (right column) primary rabbit antibodies + secondary alpaca anti-rabbit IgG VHH Alexa Fluor® 647. Scale bar, 20 μ m.