

## **Alpaca anti-rabbit IgG, recombinant VHH, Alexa Fluor® 568**

*Product code: srbAF568-1*

|                                 |   |
|---------------------------------|---|
| <b>Description</b>              | Monovalent, recombinant secondary single domain antibodies to rabbit IgG: Mixture of 2 alpaca monoclonal Nanobodies, Fab- and Fc-specific, Alexa Fluor 568 conjugated   |
| <b>Product Type</b>             | Secondary Nanobody  |
| <b>Format</b>                   | Alpaca single domain antibodies, monovalent   |
| <b>Host</b>                     | Alpaca-derived, recombinantly produced in bacteria  |
| <b>Isotype</b>                  | VHH domain of alpaca heavy chain antibody IgG2/3  |
| <b>Target/ Specificity</b>      | This Nanobody mixture recognizes Fab and Fc fragments of rabbit IgG.  |
| <b>Cross-Reactivity</b>         | No cross-reactivity to mouse, rat, sheep, goat, and guinea pig IgG/ serum<br>Cross-reactivity to human and macaque IgG/ serum   |
| <b>Immunogen</b>                | Purified rabbit IgG   |
| <b>Clonality</b>                | Biclonal: mixture of 2 monoclonal Nanobodies  |
| <b>Clones</b>                   | VHH0244, VHH0245  |
| <b>Conjugate</b>                | Site-directed conjugation to Alexa Fluor 568  |
| <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<br>Determination of cross-reactivity, sequence, affinity, melting point, and degree of labeling (DOL)   |
| <b>Affinity (K<sub>D</sub>)</b> | VHH0244: K <sub>D</sub> = 0.18 nM, VHH0245: K <sub>D</sub> = 1.2 nM   |
| <b>DOL</b>                      | 2 fluorophores per Nanobody   |
| <b>Purity</b>                   | Recombinantly expressed and purified  |
| <b>Form</b>                     | Buffered solution   |
| <b>Storage Buffer</b>           | 10 mM HEPES pH 7.0, 500 mM NaCl, 5 mM EDTA,<br>Preservative: 0.09% Sodium azide, Safety datasheet (SDS): <b>Sodium azide SDS</b>  |
| <b>Concentration</b>            | 0.5 gram VHH per liter  |
| <b>Size</b>                     | 10 µL; 100 µL   |
| <b>Storage instructions</b>     | Shipped at ambient temperature. Store at -20°C short term or -80°C long term. Aliquot upon delivery. Avoid freeze-thaw cycles. Stable for 6 months after arrival.   |
| <b>Applications</b>             | IF/ICC: recommended starting dilution 1:1,000<br>Western blot: recommended starting dilution 1:1,000<br>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.<br>Note: Image acquisition time may have to be optimized. |

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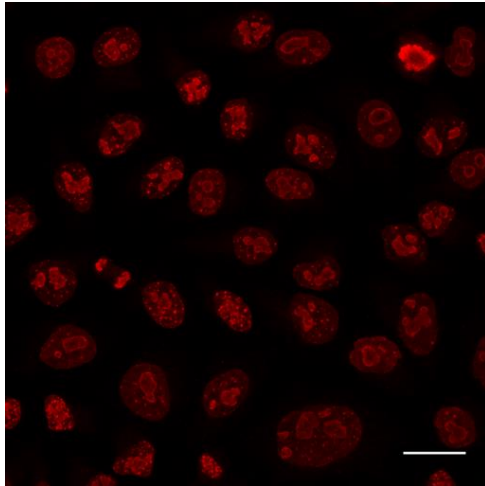
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### Tested applications

#### Immunofluorescence

Primary antibody: rabbit anti-Ki67 antibodies

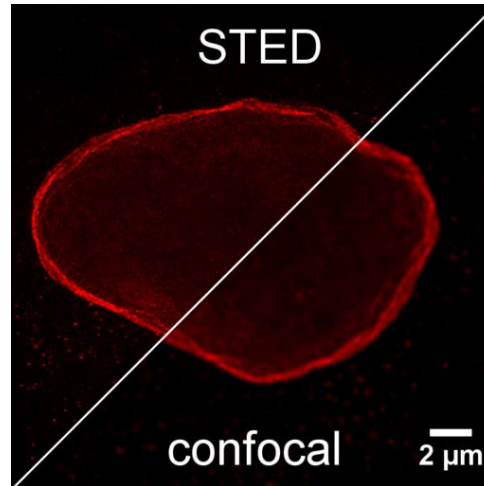
Secondary antibody: alpaca anti-rabbit IgG, recombinant VHH, Alexa Fluor 568 (srbAF568-1) 1:1,000



Immunostaining of Ki67 in HeLa cells with rabbit anti-Ki67 antibodies and alpaca anti-rabbit IgG, recombinant VHH, Alexa Fluor 568 (red). Scale bar, 20 µm.

Primary antibody: rabbit anti-Lamin B1 antibodies

Secondary antibody: alpaca anti-rabbit IgG, recombinant VHH, Alexa Fluor 568 (srbAF568-1) 1:1,000



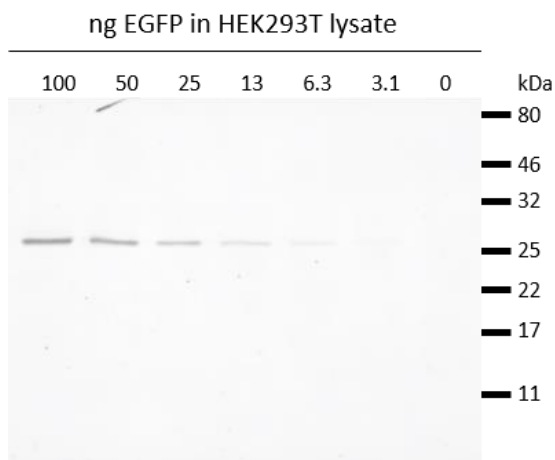
Immunostaining of nuclear lamina in HeLa cells with rabbit anti-Lamin B1 antibodies and alpaca anti-rabbit IgG, recombinant VHH, Alexa Fluor 568 (red). Scale bar, 2 µm.

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.

#### Western Blot

Primary antibody: rabbit anti-GFP PABG1 antibody (PABG1, ChromoTek) 1:1,000

Secondary antibody: alpaca anti-rabbit IgG, recombinant VHH, Alexa Fluor 568 (srbAF568-1) 1:1,000



Western blot analysis of EGFP (EGFP-250, ChromoTek) added to HEK293T cell lysate. Detection with rabbit anti-GFP PABG1 antibody and alpaca anti-rabbit IgG, recombinant VHH, Alexa Fluor 568.

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

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