

Alpaca anti-mouse IgG2b, Fc-specific recombinant VHH, Alexa Fluor® 647

Product code: sms2bAF647-1

Description Monovalent, recombinant secondary single domain antibodies to mouse IgG2b:

Mixture of 2 alpaca monoclonal Nanobodies, Fc-specific, Alexa Fluor 647 conjugated

Product type Secondary Nanobody

Format Alpaca single domain antibodies, monovalent

Host Alpaca-derived, recombinantly produced in bacteria

Target/
Specificity

This Nanobody mixture recognizes the Fc fragment of mouse IgG2b.

Cross-reactivity No cross-reactivity to rabbit, rat, sheep, goat, guinea pig, human, and macaque serum

Immunogen Purified mouse IgG2b

Clonality Biclonal: mixture of 2 monoclonal Nanobodies

Clones VHH0275, VHH0288

Conjugate Site-directed conjugation to Alexa Fluor 647

Excitation/ Excitation max: 650 nm, Emission max: 665 nm

Emission

Synonyms

Alpaca single domain antibody, V_HH , Nanobody, binding domain of single domain antibody, Nano-antibody

Validation Application validated for immunofluorescence and Western blotting

Determination of cross-reactivity, subclass specificity, sequence, affinity, melting point,

and degree of labeling (DOL)

Affinity (K_D) VHH0275: $K_D = 5.0 \text{ nM}$, VHH0288: $K_D = 0.2 \text{ nM}$

DOL 2 fluorophores per Nanobody

Purity Recombinantly expressed and purified

Form Buffered aqueous solution

Storage buffer 10 mM HEPES pH 7.0, 500 mM NaCl, 5 mM EDTA,

Preservative: 0.09% Sodium azide, Safety datasheet (SDS): Sodium azide SDS

Concentration 0.5 g/L

Size 10 μ L; 100 μ L

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.

Applications IF/ICC: recommended starting dilution 1:1,000 (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)

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.

Note: Image acquisition time may have to be optimized.



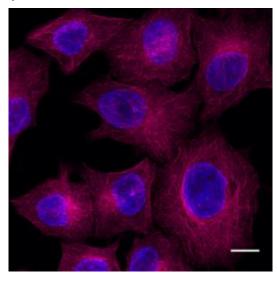
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Tested applications

Immunofluorescence

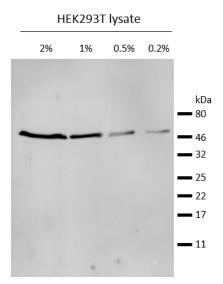
Primary antibody: mouse anti-Vimentin antibody Secondary antibody: alpaca anti-mouse IgG2b, Fc-specific recombinant V_HH , Alexa Fluor 647 (sms2bAF647-1) 1:1,000



Immunostaining of ß-Tubulin in HeLa cells with mouse anti-ß-Tubulin antibody and alpaca anti-mouse IgG2b, Fc-specific recombinant V_HH , Alexa Fluor 647 (magenta). Nuclei were stained with DAPI (blue). Scale bar, 10 μ m.

Western Blot

Primary antibody: mouse anti-ß-Tubulin antibody Secondary antibody: alpaca anti-mouse IgG2b, Fc-specific recombinant V_HH , Alexa Fluor 647 (sms2bAF647-1) 1:1,000



Western blot analysis of endogenous ß-Tubulin in HEK293T cell lysate. Detection with mouse anti-ß-Tubulin antibody and alpaca anti-mouse IgG2b, Fc-specific recombinant $V_{\rm H}H$, Alexa Fluor 647.

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

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