

Product Sheet



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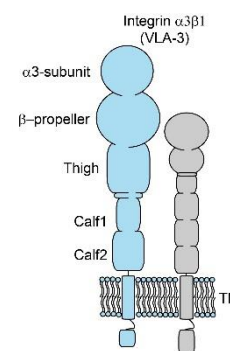
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Integrin $\alpha 3 \beta 1$ (VLA-3)

Catalogue no.: Q49c
Clone name: H6

Product: VHH directed against VLA-3
Target: Integrin $\alpha 3 \beta 1$ (VLA-3 or CD49c, UniProtKB P26006) belongs to the family of integrins, heterodimeric cell surface receptors that play a pivotal role in cell adhesion, migration, growth and survival. The integrin family contains 18 α - and 8 β -subunits that can form 24 different integrin heterodimers that bind different ligands. Via cooperation with other types of cell surface receptors (e.g. growth factor or G-protein coupled receptors), integrins can regulate intracellular signaling. Integrin beta-1 is the most abundant β -integrin forms dimers with at least 10 different alpha subunits to form for example the Very Late Antigens VLA-3 ($\alpha 3 \beta 1$ integrin) or VLA-4 ($\alpha 4 \beta 1$ integrin). VLA-3 functions as a receptor for collagen, laminin, and fibronectin and overexpressed in various types of cancer.¹⁻⁷



Source: Recombinant monoclonal VHH (Llama glama), purified from *S.cerevisiae* using affinity chromatography. Immunization with A431 cells. Phage-display selection on HeLa cells.⁸

Specificity: Human Integrin $\alpha 3 \beta 1$.⁸

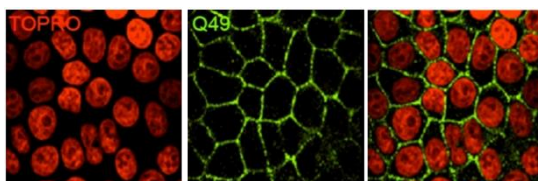
Formulation: 0.2 μm filtered solution in PBS. The products are equipped with a C-terminal C-Direct tag with an unpaired cysteine for directional conjugation.

Mol. Weight: 15.2 kDa
Ext. Coeff. (ϵ): 28545 $\text{M}^{-1} \text{cm}^{-1}$
A₂₈₀ at 1g/L: 1.9

Storage: Shipped on blue ice. Store at 4°C or -20°C (aliquots). Addition of 0.02% sodiumazide is optional.

Applications: ELISA, IF

Examples:



Immunofluorescence microscopy image of Q49 (H6, green) on HeLa cells.

References:

- 1 Liu, S. et al. (2000) *J Cell Sci* 113:3563-71
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- 3 Hynes, R.O. (1992) *Cell* 69:11-25
- 4 van der Flier, A. and Sonnenberg, A. (2001) *Cell Tissue Res* 305:285-298
- 5 Ramovs, V. et al. (2017) *Matrix Biol* 57-58:213-243
- 6 Sun, Q. et al. (2018) *Onco Targets Ther* 11:1787-1799
- 7 Elices M.J. et al. (1991) *J Cell Biol* 112:169-181
- 8 Groot A.J. et al. (2009) *Mol Immunol* 46:2022-2028