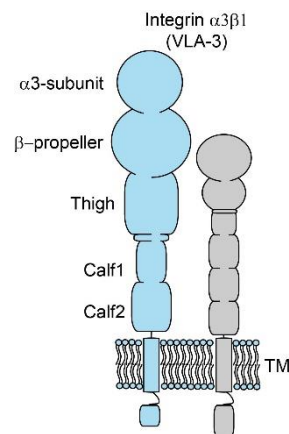


Integrin $\alpha 3\beta 1$ (VLA-3)

Catalogue no.: Q48 and Q49
Clone names: VHH5 and H6
Product: VHH directed against Integrin $\alpha 3\beta 1$ (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.^{1,2} The integrin family contains 18 α - and 8 β -subunits that can form 24 different integrin heterodimers that bind different ligands.^{3,4} Via cooperation with other types of cell surface receptors (e.g. growth factor or G-protein coupled receptors), integrins can regulate intracellular signaling.⁵ 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).⁵ VLA-3 functions as a receptor for collagen, laminin, and fibronectin and overexpressed in various types of cancer.⁶



Source: Recombinant monoclonal VHH (*Llama glama*), purified from *S.cerevisiae* using affinity chromatography.

Immunization with A431 cells.⁸ Phage-display selection on HeLa cells.⁸

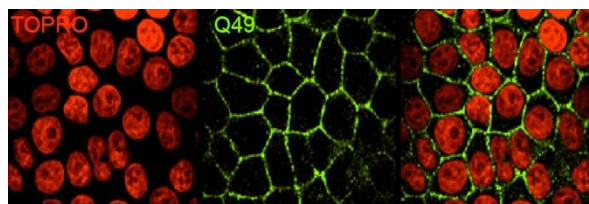
Specificity: Human Integrin $\alpha 3\beta 1$.

Formulation: 0.2 μ m filtered solution in PBS.

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.

Products:

Cat. No.	Target	Tag	Label
Q48/Q49	Integrin $\alpha 3\beta 1$	Tagless	No label
Q48c/Q49c	Integrin $\alpha 3\beta 1$	C-direct	No label
Q48c-lab/Q49c-lab	Integrin $\alpha 3\beta 1$	C-direct	Biotin / NOTA / HiLyte488 / IRDye800CW

References:

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- [Hynes, R.O.](#) (1992) Cell 69:11-25
- [van der Flier, A. and Sonnenberg, A.](#) (2001) Cell Tissue Res 305:285-298
- [Ramovs, V. et al.](#) (2017) Matrix Biol 57-58:213-243
- [Sun, Q. et al.](#) (2018) Onco Targets Ther 11:1787-1799
- [Elices M.J. et al.](#) (1991) J Cell Biol 112:169-181
- [Groot A.J. et al.](#) (2009) Mol Immunol 46:2022-2028