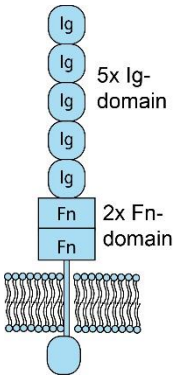
Neural Cell Adhesion Molecules 1 (NCAM-1)

Catalogue no.: **Q55**
Clone name: **10B10**

Product: **VHH directed against Neural cell adhesion molecules 1 (NCAM1) / CD56**

Target: The Neural Cell Adhesion Molecule 1 (NCAM-1, UniProtKB P13591) is a glycoprotein expressed on the membranes of neurons, glia and muscle cells.[1] However, it is also found to be expressed in cells of the immune system (NK cells, T-cells and dendritic cells).[2] There are 4 types of NCAM-1 of which one variant is soluble, while the others or linked to the plasma mebrane via a GPI-anchor (120 kDa) or via a transmembrane domain (140 and 180 kDa). All types contain the 5x Ig-like domains and 2x Fn-like domains. NCAM-1 functions in cell-cell adhesion via binding to extracellular matrix protein agrin and several proteoglycans.[3] In addition, its functioning is regulated via attachement of polysialylic acid to NCAM, generating PSA-NCAM.[4]



Source: Recombinant monoclonal VHH (*Llama glama*), purified from *S.cerevisiae* using affinity chromatography.
Immunization with FSHD patient material. Phage-display selection on cells and captured ectodomain with total elution.

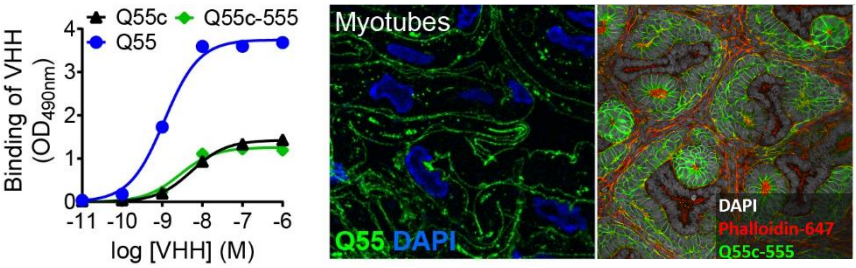
Specificity: Human NCAM-1.

Formulation: 0.2 µm 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, FACS, imaging

Examples:



Binding of Q55, Q55c and Q55c-Hylite555 to recombinant NCAM-1 in ELISA (left), to NCAM-1 in myotubes in IF (middle) and embryonic renal tissue (right). [5]

Products:

Cat. No.	Target	Tag	Label
Q55	HGFR/Met	Tagless	No label
Q55c	HGFR/Met	C-direct	No label
Q55c-lab	HGFR/Met	C-direct	Biotin / NOTA / HiLyte488 / IRDye800CW

References:

1 Dickson *et al.* (1987) Cell, 50, 1119-1130
2 Rutishauser *et al.* (1982) PNAS, 79, 685-689
3 Kasper *et al.* (2000) Nat Struct Biol, 7, 389-393
4 Hildebrandt *et al.*, (2010) Adv Exp Med Biol, 663, 95-109
5 van Ineveld *et al.*, (2021) Nat Biotechnology, 39, 1239-1245