## **Product Sheet**





migration

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## **Vimentin**

Catalogue no.: O60c Clone name: FSH-5G1

Product: VHH directed against Vimentin

Target: Vimentin, UniProtKB P08670) is a class III intermediate filament (IF) protein,

predominantly found in mesechymal cells. IFs are, besides actin and tubulin, one of the basic cytoskeletal component. Vimentin has a size of 466 amino acids or 57 kDa protein and is encoded by the VIM gene. Vimentin contains three linked coiled-coil domains and can be phosphorylated on serines and threonines. Vimentins can organize into unit-length filaments (ULFs) with a diameter of ~11 nm by longitudinal selfassociation of four octamers. Structures shown are derived from PDB files 3UF1 and 5WHF.<sup>1-4</sup>

Recombinant monoclonal VHH (Llama glama), purified from S.cerevisiae Source:

using affinity chromatography. Immunization with muscle cells. Phage-

display selection on captured Vimentin with total elution.

Specificity: Human Vimentin.5

Formulation: 0.2 µm filtered solution in PBS. The products are equiped with a C-terminal C-

Direct tag with an unpaired cysteine for directional conjugation.

Mol. Weight: 14.6 kDa 23045 M<sup>-1</sup> cm<sup>-1</sup> Ext. Coeff. (ε):

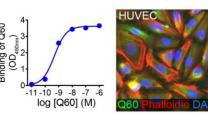
A<sub>280</sub> at 1g/L: 16

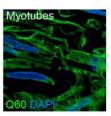
Shipped on blue ice. Store at 4°C or -20°C (aliquots). Addition of 0.02% Storage:

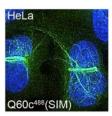
sodiumazide is optional.

Applications: ELISA, IF, IHC

**Examples:** 







Binding of Q60 to immobilized recombinant vimentin in ELISA, HUVEC cells in IF and myotubes in IHC. Bound VHHs were detected using rabbit-anti-VHH and donkey-anti-rabbit secondairy antibodies. Directionally conjugated Q60c in HeLa cells as imaged by structured illumination microscopy (SIM).

## References:

1 Ferrari et al., (1986) Mol Cell Biol 6, 3614-3620

2 Sokolova et al., (2006) PNAS 103, 16206-16211

3 Aziz et al., (2012) J Biol chem 287, 28349-28361

4 Obiero et al., (2018) FEBS J, doi: 10.1111/febs.14585

5 van Beijnum et al., (2022) Nat Comm, 13, 2842