

HIV Gag capsid protein p24

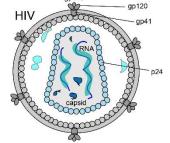
Catalogue no.: Q76c Quantity: 250 μg

Product: VHH directed against HIV p24

Target: HIV-1 is an enveloped RNA lentivirus from the

retroviridae family ¹. The viral capsid contains RNA and enzymes is formed by organized p24 protein (UniProtKB Q9WMv8).¹⁻³ p24 is formed upon cleavage of the P55 Gag protein, which is encoded by the HIV-1 gag gene. ¹⁻³ Other cleavage products are p17, p7, and p6 proteins, which are required for virus assembly ¹⁻³

p6 proteins, which are required for virus assembly. $^{1\text{-}3}$ p24 is an indicator of HIV-1 infection and viral load. 4



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

Immunization with recombinant proteins. Phage-display selection on captured

recombinant protein using competitive or total elution.

Specificity: Q76 detects HIV Gag capsid protein p24 (CA) of 48/50 HIV strains with an apparent

binding affinity of <1 nM. D type viruses were not detected very well.⁵

Formulation: 0.2 μm filtered solution in PBS.

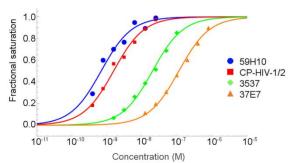
MW: 14.1 kDa, Ext. Coeff. (ϵ)_{280nm}: 22585 M⁻¹·cm⁻¹, A₂₈₀ at 1g/L: 1.60

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

Addition of 0.02% sodiumazide is optional.

Applications: ELISA, biolayer interferometry⁵, surface acoustic wave⁶

Examples:



Binding of Q76 (59H10) and Q82(37E7) to p24 as determined by biolayer interferometry⁵

References:

- 1 Ganser-Pornillos B.K. et al. (2008) Curr Opin Struct Biol 18:203–217
- 2 Bell N.M. and Lever A.M. (2013) Trends Microbiol 21:136-144
- 3 de Marco A. et al., (2010) PLoS Pathog 6:e1001215
- 4 Witt D.J. (1999) Clin Diagn Lab Immunol 6:369-376
- 5 Gray E.R. et al. (2017) ACS Infect Dis 3:479-491
- 6 Turbé et al. (2017) Sci Rep 7:11971