

Product Sheet



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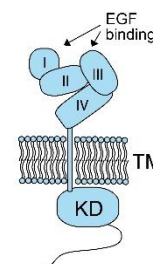
Yalelaan 1
3584 CL Utrecht
The Netherlands
+31 30 253 3421

www.qvquality.com
KvK: 30274082
VAT: 8215.17.168
NL88 RABO0153194936

Epidermal Growth Factor Receptor (EGFR)

Catalogue no.: Q86c
Clone name: EGb4

Product: VHH directed against EGFR
Target: The epidermal growth factor receptor (EGFR/ErbB1/HER1, UniProtKB P00533) is one of the members of a family of 4 receptor tyrosine kinases (ErbB1 to 4). EGFR is a single membrane spanning protein of which binding of its natural ligands to the extracellular N-terminal domains I and III results in activation of the intracellular kinase domain (see figure). EGFR plays an important role in cell proliferation, survival and angiogenesis and it is overexpressed on and contributes to the development of a large number of cancers. EGFR is a validated tumor marker and an important therapeutic target.¹⁻⁶



Source: Recombinant monoclonal VHH (Llama glama), purified from *S.cerevisiae* using affinity chromatography. Immunization with A431 cells. Phage-display selection on EGFR in immobilized membranes with competitive elution.^{4,5}

Specificity: Human EGFR. Epitope: Extracellular domain. Q44 (domain III, EGF-competing) and Q86 (domain I, non EGF-competing) bind to non-overlapping epitopes.^{4,5}

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): 34045 M⁻¹ cm⁻¹
A₂₈₀ at 1g/L: 2.2

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

Applications: ELISA, IF

References:

- 1 Roskoski. R., (2014) *Pharmacol Res* 79:34-74
- 2 Yarden Y., (2001) *Eur J Cancer* 37:53-8
- 3 van Driel et al., (2014) *Int J Cancer* 134:2663-2673
- 4 Roovers et al., (2007) *Cancer Immunol Immunother* 5:303-317
- 5 Hofman et al., (2008) *J Cell Sci* 121:2519-2528
- 6 Oliveira et al., (2012) *Mol Imaging* 11:33-46