

# Product Sheet



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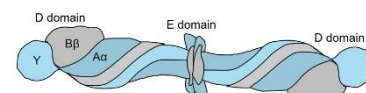
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## Fibrinogen

**Catalogue no.:** Q113  
**Clone name:** C3

**Product:** VHH directed against fibrinogen

**Target:** Fibrinogen (coagulation factor I) is a glycoprotein complex that circulates in the blood of vertebrates. It consists as a dimer of 3 pairs of non-identical chains, A $\alpha$ , B $\beta$  and  $\gamma$ , which are cross-linked by disulfide bonds in their N-terminal segments.<sup>1</sup> Additionally, the molecule has 2 terminal D domains and one central E domain.<sup>1</sup> During injury fibrinogen is converted enzymatically by thrombin to form individual fibrin strands by attacking the N-terminus of the A $\alpha$  and  $\gamma$  chains.<sup>2</sup> The individual fibrin strands polymerize and are crosslinked by blood coagulation factor XIIIa to form an extensive interconnected fibrin network, which forms the basis for the formation of a mature fibrin clot.<sup>2</sup> In addition, fibrinogen connects platelets through binding to fibrinogen receptor integrin  $\alpha$ IIb $\beta$ 3 (GPIIb/IIIa), mediates platelet and endothelial cell spreading, fibroblast proliferation, capillary tube formation, and angiogenesis and thereby promote revascularization and wound healing. Elevated levels of fibrinogen can cause thrombosis and associated vascular injury.



**Note:**

This product has been generated and purified by Podiceps BV.

**Source:** Immunization with and phage-display selection on purified human fibrinogen using total elution. Recombinant monoclonal VHH (Llama glama), purified from HEK293-E 253 cells using Nickel excel Sepharose affinity chromatography.

**Specificity:** Human fibrinogen.  
C3 does not block the binding of fibrinogen to integrin GPIIb/IIIa.

**Formulation:** Myc-tagged PBS.

**Mol. Weight:** 15.6 kDa  
**Ext. Coeff. ( $\epsilon$ ):** 26832 M<sup>-1</sup> cm<sup>-1</sup>  
**A<sub>280</sub> at 1g/L:** 1.7

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

**Applications:** ELISA, flow cytometry (FC)

### References:

- 1 Mosesson (2005) J Thromb Haemost 3(8):1894-904
- 2 Weisel and Litvinov, (2013) Blood 121(10): 1712-1719
- 3 Huang et al., (2019) J Hematol Oncol 12(1):26