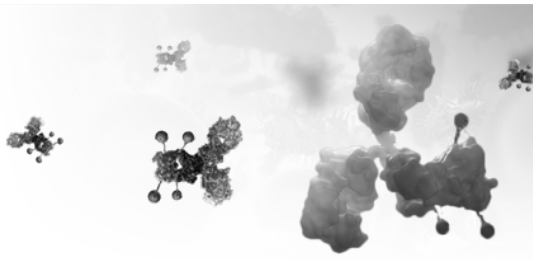

Anti-FGG polyclonal antibody (DPAB2126SH)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Antigen Description	Human fibrinogen is a 340 kDa plasma protein produced in theliver. Plasma concentrations are typically 1.7 – 3.5 g/L (5-10 µM). The intactfibrinogen molecule consists of two identical subunits, each consisting ofthree non-identical polypeptide chains denoted as Aα, Bβ and γ. The letters Aand B in the Aα and Bβ chains designate, respectively, fibrinopeptide A (FpA,residues 1-16), and fibrinopeptide B (FpB, residues 1-14), which are cleavedby thrombin upon conversion of fibrinogen to fibrin. The fibrin monomerspolymerize in a half-overlap fashion to form insoluble fibrin fibrils. Thepolymerised fibrin is subsequently stabilized by activated Factor XIII thatforms amide linkages between γ chains and, to a lesser extent, α chains of thefibrin molecules. Proteolysis of fibrinogen by plasmin initially liberatesC-terminal residues from the Aα chain to produce fragment X (intact D-E-D, whichis still clottable). Fragment X is further degraded to nonclottable fragmentsY (D-E) and D. Fragment Y can be digested into its constituent D and Efragments. Proteolysis of crosslinked fibrin by plasmin results in fragmentDD (D-Dimer consisting of the D domains of 2 fibrin molecules crosslinked viathe γ chains), fragment E (central E domain) as well as DDE in which fragmentE is noncovalently associated with DD. The molecular weights of the cleavage fragments produced from human crosslinked fibrin are: 184kDa for fragment DD, 92 kDa for D, 50 kDa for E, 1.54 kDa for FpA and 1.57kDa for FpB. Most of the fibrinogen in the circulation consists of 2 copiesof each chain (Aα2, Bβ2, γA2), but in normalplasma approximately 10% of the fibrinogen molecules contain one γA chainand one variant γ chain (termed γ´), in which the c-terminal AGDV residuesare replaced with the amino acid sequence VRPEHPAETEYDSLYPEDDL. This variant fibrinogen is commonly referred to as fibrinogen gamma prime (γA/γ´)but has also been called fibrinogen 2 or peak 2 fibrinogen because it elutesseparately from fibrinogen 1 (γA2) by ion exchange chromatography.Residues 414-427 of the γ´ chain of fibrin gamma prime (contain ahigh-affinity binding site for exosite II of thrombin, which allows theactive site of bound thrombin to remain available to interact with substrateswhile demonstrating resistance to heparin mediated inhibition by antithrombin.
Specificity	This antibody isspecific for γ´-containing forms of fibrinogen, as demonstrated byimmunoelectrophoresis and immunoblotting.

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Immunogen	Asynthetic peptide containing the sequence unique to the γ´ chain (VRPEHPAETEYDSLYPEDDL) conjugated to keyhole limpet hemocyanin carrier.
Source/Host	Sheep
Species Reactivity	Human
Conjugate	Unconjugated
Size	5 mg
Buffer	10 mM HEPES, pH 7.4, 150 mM NaCl, 50% (v/v) glycerol.
Preservative	None
Storage	Store between –10°Cand –20°C. Product will become viscous but will not freeze. Avoid storage infrost-free freezers. Keep vial tightly capped. Allow product to warm to room temperature andgently mix before use.

GENE INFORMATION

Gene Name	FGG fibrinogen gammachain [Homo sapiens]
Official Symbol	FGG
Synonyms	Fg-γ´ FGG;fibrinogen gamma chain; fibrinogen, gamma polypeptide; PRO2061; OTTHUMP00000197057;OTTHUMP00000197058; OTTHUMP00000197059; OTTHUMP00000197060; Fibrinogen GammaPrime
Entrez Gene ID	2266
Protein Refseq	NP_000500
UniProt ID	P02679
Chromosome Location	4q28
Pathway	Blood ClottingCascade; Common Pathway; Complement and coagulation cascades; Formation ofFibrin Clot (Clotting Cascade); GRB2:SOS provides linkage to MAPK signalingfor Intergrins; Glucocorticoidreceptor regulatory network; Hemostasis; IL6-mediated signaling events; IntegrinalphaIIb beta3 signaling; Integrin cell surface interactions; PlateletAggregation (Plug Formation); Platelet activation, signaling and aggregation;Platelet degranulation; Response to elevated platelet cytosolic Ca2+; SignalT
Function	eukaryotic cellsurface binding; protein binding, bridging; receptor binding

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