

Materials List for:

Microfluidic Flow Chambers Using Reconstituted Blood to Model Hemostasis and Platelet Transfusion *In Vitro*

Britt Van Aelst¹, Hendrik B. Feys¹, Rosalie Devloo¹, Philippe Vandekerckhove^{2,3,4}, Veerle Compernolle^{1,2,4}

Correspondence to: Hendrik B. Feys at hendrik.feys@rodekruis.be

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Materials

Name	Company	Catalog Number	Comments
BD vacutainer tube with EDTA	Becton, Dickinson and Company	368856	
BD vacutainer tube with Heparin	Becton, Dickinson and Company	368480	
BD vacutainer tube with Sodium Citrate	Becton, Dickinson and Company	366575	
Hirudin Blood tube	Roche	6675751 001	
BD vacutainer Eclipse	Becton, Dickinson and Company	368650	Blood collection needle with preattached holder
Pipette tips 100-1,000	Greiner bio-one	740290	
Pipette tips 2-200	Greiner bio-one	739280	
Pipette tips 1-10	Eppendorf	A08928	
Tube 5 ml	Simport	11691380	
Conical tube 15 ml	Greiner bio-one	1888271	
Conical tube 50 ml	Greiner bio-one	227261	
10 ml Syringe	BD	309604	
Precision wipes	Kimtech	5511	
Vena8 Fluoro+ Biochips	Cellix	188V8CF-400-100-02P10	Named in Figure S1 A as 'Biochip'
Vena8 Tubing	Cellix	TUBING-TYGON-B1IC-B1OC- ROLL 100F	Named in Figure S1 B as 'Disposable tubing'
Vena8 Needles	Cellix	SS-P-B1IC-B1OC-PACK200	Named in Figure S1 B as 'Pin'
Connectors for single inlet cables of biochips	Cellix	CONNECTORS-B1IC-PACK100	
Multiflow8 connect	Cellix	MF8-CONNECT-BIC3-N- THROMBOSIS	Named in Figure S1 B as 'Reusable tubing' and 'Splitter'
Humidified box	Cellix	HUMID-BOX	
Software microfluidic pump	Cellix	N/A	Venaflux Assay
Horm Collagen	Takeda/Nycomed	1130630	Native equine tendon collagen (type I) Isotonic glucose solution to dilute collagen is supplemented
HEPES buffered saline (HBS)	in house preparation	in house preparation	10 mM 4-(2-hydroxyethyl)-1- piperazineethanesulfonic acid (HEPES) buffered saline (0.9% (w/ v) NaCl, pH 7.4)
Blocking buffer	in house preparation	in house preparation	1.0% (w/v) bovine serum albumin and 0.1% (w/v) glucose in HBS

¹Transfusion Research Center, Belgium Red Cross-Flanders

²Blood Service, Belgium Red Cross-Flanders

³Department of Public Health and Primary Care, Catholic University of Leuven

⁴Faculty of Medicine and Health Sciences, University of Ghent



Calcein AM	Molecular probes	C1430	
Bleach 10%	in house preparation	in house preparation	
0.1 M NaOH	in house preparation	in house preparation	
Denaturated alcohol	Fiers	T0011.5	
Mirus Evo Nanopump	Cellix	188-MIRUS-PUMP-EVO	with Multiflow8. Named in Figure S1 A as 'Pump' and 'Manifold'
Microscope	Zeiss	Axio Observer Z1	equipped with a colibri-LED and high resolution CCD camera
Software microscope	Zeiss	N/A	ZEN 2012
Hematology analyzer	Sysmex	N/A	
Table Top Centrifuge	Eppendorf	521-0095	
Platelet incubater	Helmer	PF-48i	
Incubation water bath	GFL	1013	
Pipette	Brand	A03429	
Tube Roller	Ratek	BTR5-12V	
Sterile docking device	Terumo BCT	TSCD	
Tubing Sealer	Terumo BCT	AC-155	
Vortex	VWR	58816-121	