

Materials List for:

# Fast and Specific Assessment of the Halogenating Peroxidase Activity in Leukocyte-enriched Blood Samples

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URL: <https://www.jove.com/video/54484>

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## Materials

Name	Company	Catalog Number	Comments
<i>Materials/Equipment</i>			
15 ml centrifugation tubes	VWR/Corning	734-0451	-
1.5 ml sample tubes	VWR/Eppendorf	211-2130DE	-
Pipettes for volumes up to 5 ml	Eppendorf	e.g., 3120000070	We are using Eppendorf Research plus pipettes with adjustable volumes in the range 1-10 µl, 10-100 µl, 100-1,000 µl an 500-5,000 µl
laminar flow bench	Thermo Electron Corporation	HeraSafe	-
Vortex mixer	Bender & Hobein AG	Vortex Genie 2	-
Tabletop centrifuge	Kendro Laboratory Products	Laborfuge 400R	The centrifuge should be able to be used at 450 x g
Small centrifuge	Eppendorf	5415D	The centrifuge should be able to be used at 400 x g
Incubator	Heraeus	cytoperm 2	Settings: 37 °C, 95% humidity, 5% CO <sub>2</sub> content
UV-Vis spectrophotometer	Varian	Cary 50 bio	A spectrum between 200 and 300 nm has to be recorded. Thus quartz cuvettes have to be applied
Flow cytometer	Becton, Dickinson	BD Facs Calibur	Any flow cytometer can be used which is equipped with a laser suitable for the excitation of fluorescein (e.g., 488 nm argon laser)
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<i>Chemicals</i>			
Phosphate buffered saline (PBS)	amresco	K812	sterile solution, ready to use
Phosphate buffered saline (PBS)	Sigma-Aldrich	P4417	tablets for solving in 200 ml millipore water
Hanks balanced salt solution (HBSS) with Ca <sup>2+</sup>	Sigma-Aldrich	H1387	970 mg/100 ml, carefully check and adjust the pH value to 7.4
Hydrochloric acid	Merck Millipore	1.09057.1000	1 M solution
Sodium hydroxide	Riedel-deHaën	30620	Solid pellets. For a 1 M solution solve 4 g/100 ml Millipore water
Aminophenyl fluorescein	Cayman	10157	5 mg/ml solution (11.81 mM) in methyl acetate, aliquots (e.g. 100 µl) should be prepared and stored at -20 °C
Hydrogen peroxide	Sigma-Aldrich	H1009	This 30% stock solution corresponds to a concentration

			of about 8.8 M. Further dilutions have to be freshly prepared in distilled water immediately prior to use and quantified by absorbance measurements
4-aminobenzoic acid hydrazide (4-ABAH)	Sigma-Aldrich	A41909	A first stock solution of 1 M should be prepared in DMSO a second one of 100 mM by 1:10 dilution in HBSS
DMSO	VWR chemicals	23500.26	-