Materials List for:

The 4-vessel Sampling Approach to Integrative Studies of Human Placental Physiology *In Vivo*

Ane M. Holme^{1,2}, Maia B. Holm^{1,2}, Marie C. P. Roland^{1,3}, Hildegunn Horne^{1,2}, Trond M. Michelsen^{1,3}, Guttorm Haugen^{2,4}, Tore Henriksen^{1,2}

Correspondence to: Ane M. Holme at sbhmoa@ous-hf.no

URL: https://www.jove.com/video/55847

DOI: doi:10.3791/55847

Materials

Name	Company	Catalog Number	Comments
Maternal body composition			
Impedance scale	Tanita		or similar
Ultrasound measurements			
Sequoia 512 ultrasound machine	Acuson		equipped with a curved transducer with colour and pulsewave Doppler (frequency bandwidth 2 - 6 MHz)
Blood samples			
Arerial cannula	BD Medical	682245	or similar
20 cc Eccentric Luer Tip Syringe without Needle	Termo	SS-20ES	or similar. 3 needed.
10 cc Eccentric Luer Tip Syringe without Needle	Termo	SS-10ES	or similar. 9 needed.
5 cc 6% Luer Syringe without Needle	Termo	SS-05S1	or similar. 2 needed.
Arterial blood gas syringe	Radiometer Medical		or similar. 4 needed.
Sterile winged needle connected to flexible tubing, 21 gauge	Greiner Bio-One	450081	(intended for single use).3 needed.
Vacutainer tube 6 mL EDTA	Greiner Bio-One	456043	or similar. Label with sample site. 10 needed.
Vacutainer tube 5 mL LH Lithium Heparin Separator	Greiner Bio-One	456305	or similar. Label with sample site. 5 needed.
Vacutainer tube 6 mL Serum Clot Activator	Greiner Bio-One	456089	or similar. Label with sample site. 5 needed.
Vacutainer tube 3 mL 9NC Coagulation sodium citrate 3.2%	Greiner Bio-One	454334	or similar. Label with sample site. 5 needed.
Cryogenic vials, 2.0 mL	Corning	430488	or similar. Label with sample site, serum/type of plasma and ID. 90 needed.
Marked trays to transport the syringes			to transport the blood samples in the operation theatre
Rocker			for gentle mixing of the samples
Ice			in styrofoam box
Liquid nitrogen			in appropriate container
Placenta samples			
Metal tray			
Ice			in styrofoam box

¹Department of Obstetrics, Oslo University Hospital

²Institute of Clinical Medicine, University of Oslo

³Norwegian Advisory Unit on Women's Health, Oslo University Hospital

⁴Department of Fetal Medicine, Oslo University Hospital

Calibrated scale			
Metal ruler			
1 M Phosphate buffered saline	Sigma	D1408	or similar. Dilute 10 M to 1 M before use
RNA stabilization solution	Sigma	R0901-500ML	or similar
Optimal Cutting Temperature (O.C.T.) compound	vwr	361603E	or similar
Cryogenic vials, 2.0 mL	Corning	430488	or similar. Label with sample site. content and ID. 10 needed.
Centrifuge tubes, conical bottom 50 mL	Greiner Bio-One	227,285	or similar. Label with "RNA later", sample site and ID. 2 needed.
Liquid nitrogen			in appropriate container
Fetal body composition			
Calibrated scale			
Measuring tape			