

Materials List for:

# Human Placental and Decidual Organ Cultures to Study Infections at the Maternal-fetal Interface

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## Materials

Name	Company	Catalog Number	Comments
Sterilization pouches	Fisher Scientific	01-812-54	For autoclaving individual dissecting tools
Fine mesh strainer	Cuisinart (Amazon.com)	NA	Wrap completely in aluminum foil and autoclave prior to tissue collection.
Carboy with spigot	Fisher Scientific	03-007-647	For large volume preparation of Wash buffer.
Ice packs	Nortech labs	GB8818	These do not have to be purchased, rather they can be recycled/reused from any routine laboratory shipment that includes them in the packaging.
70% Ethanol	VWR	V1001	70% solution made by adding dH <sub>2</sub> O to 190 or 200 proof research grade alcohol.
10% Bleach	Waxie Sanitary Supply	CLO 30966	10% solution made by adding dH <sub>2</sub> O.
Light Box	Litebox Lumina (dickblick.com)	55305-2009	Note replacement bulbs also purchased on Blick (55305.0100)
Micro dissecting forceps	Stoelting	52102-43	4 inches, 1 x 2 x 0.5 mm <sup>3</sup> , Slight Curve
Micro dissecting forceps	Stoelting	52102-06	4 inches, Straight Fine, Sharp
Micro dissecting vannas spring scissors	Stoelting	52130-01P	McPherson-Vannas Spring Scissors, 8.5 cm, 0.33 Tip, Slight Curve
Dissecting microscope	Leica Microsystems	MZ16 or M60	We have had success with the listed models. External gooseneck flexible light sources are helpful but not necessary.
50 ml conical tubes	Sigma-Aldrich (Corning)	CLS4558	
Phosphate Buffered Saline	Gibco (ThermoFisher Scientific)	10010023	We purchase from our university Tissue Culture Core facility, alternate options such as this are available.
10x Phosphate Buffered Saline	Teknova	P0195	For preparation of Wash buffer we use 10x PBS
DMEM/F-12 nutrient mixture (Ham's) with GlutaMAX	Gibco (Life Technologies)	10565-018	We purchase this specific media formulation, containing 2.438 g/ L sodium bicarbonate, 55 mg/

			L sodium pyruvate, and 4.5 g/L glucose
Gentamicin	Thermofisher Scientific	15710072	1, 000x stock. Recommend to prepare and store aliquots at -20 °C to avoid freeze/thaw.
Penicillin/Streptomycin	Gibco (ThermoFisher Scientific)	15140-122	100x stock. Recommend to prepare and store aliquots at -20 °C to avoid freeze/thaw.
Amphotericin B	Gibco (ThermoFisher Scientific)	15290-018	500x stock. Recommend to prepare and store aliquots at -20 °C to avoid freeze/thaw.
progesterone	Sigma-Aldrich	P8783	A 1 mM stock solution is made by reconstituting 15.7 mg progesterone powder in 15.7 ml Ethanol and adding 34.3 ml PBS. Solution is sterile filtered, aliquoted, and stored at -20 °C.
17 $\beta$ -estradiol	Sigma-Aldrich	E2758	A 10 $\mu$ M stock solution is made by reconstituting 13.5 mg estradiol powder in 10 ml ethanol and adding 40 ml PBS. Solution is sterile filtered, aliquoted, and stored at -20 °C.
Bottle-top vacuum filter (0.22 $\mu$ m)	Sigma-Aldrich (Corning)	CLS430769	For sterile filtration of Collection media after preparation
6-well tissue culture plate	BD Falcon	353224	Polystyrene, Tissue culture treated
6-well transwells	Millipore	PICM03050	Insert - 30 mm diameter, 0.4 $\mu$ m pore size hydrophilic PTFE membrane
Extracellular Matrix (for example, Matrigel Matrix)	BD Biosciences	354234	We have utilized Matrigel Matrix in our studies. It is a solid at room temperature and at -20 °C. Avoid repeat freeze/thawing. Thaw bottle to viscous solution at 4 °C, and prepare ~ 300 $\mu$ L aliquots in the cold room with chilled pipette tips. Store aliquots at -20 °C.
Paraformaldehyde, 16% w/v aqueous solution	Alfa Aesar	30525-89-4	For tissue fixation, a fresh preparation of 4% paraformaldehyde is made by diluting this stock in PBS.
Tissue culture incubator, maintained at 37 °C, 5% CO <sub>2</sub> , 3% oxygen (optional for villous organ cultures)			For some experiments, hypoxia may be preferred. This can be established multiple ways, including addition of exogenous nitrogen via gas cylinder, Tygon tubing, and a regulator.
Bench top centrifuge			