

Materials List for:

# Setting-up an *In Vitro* Model of Rat Blood-brain Barrier (BBB): A Focus on BBB Impermeability and Receptor-mediated Transport

Yves Molino<sup>1</sup>, Françoise Jabès<sup>1</sup>, Emmanuelle Lacassagne<sup>2</sup>, Nicolas Gaudin<sup>2</sup>, Michel Khrestchatisky<sup>2</sup>

<sup>1</sup>VECT-HORUS SAS

<sup>2</sup>Aix-Marseille Université, CNRS, NICN UMR 7259

Correspondence to: Michel Khrestchatisky at [michel.khrestchatisky@univ-amu.fr](mailto:michel.khrestchatisky@univ-amu.fr)

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## Materials

Name	Company	Catalog Number	Comments
BSA fraction V low endotoxin	PAA	K45-011-500g	4 °C
Penicillin-streptomycin	Invitrogen	15140-122	-20 °C
0.05% Trypsin-EDTA (1X)	Invitrogen	25300-054	-20 °C
DMEM high glucose	Invitrogen	61965-026	4 °C
Fetal bovine serum	Invitrogen	10270-098	-20 °C / 1 year
T75 flasks	Becton Dickinson Falcon	353135	
HEPES buffer (1 M)	Invitrogen	15630-056	4 °C / 1 year
Collagen type IV mouse (10 x 1 mg)	Becton Dickinson	356233	-20 °C / 1 month
Fibronectin humain plasma (5 mg)	Becton Dickinson	356008	-20 °C / 1 month
Vannas spring scissors, straight (9 cm)	Fine Science Tools	91500-09	
Scissors, straight (9 cm)	Fine Science Tools	14568-09	
Forceps Dumont #5/45 (11 cm)	Fine Science Tools	11251-35	
Graefe Forceps, tip width 0.8 mm	Fine Science Tools	11050-10	
Graefe Forceps, curve tip width 0.8 mm	Fine Science Tools	11051-10	
Collagenases / dispase mix (2 x 5 mg)	Roche Diagnostics	05 401 054 001	-20 °C / 3 months
DNase I (100 mg / 569 KU / mg)	Sigma Aldrich	DN25-100 mg	-20 °C / 1 year
Gentamicin (10 mg/ml)	Invitrogen	15710-049	4 °C / 1 year
DMEM/F12	Invitrogen	31331-028	4 °C
Bovine serum from platelet poor plasma (500 ml)	Clinisciences	BT-214-100	-20 °C / 1 year
bFGF (10 µg)	Invitrogen	13256-029	-20 °C / 6 months
Heparine Na salt from porcine mucosa Grade I	Sigma Aldrich	H3149-100KU	4 °C / 1 year
Puromycin	Sigma Aldrich	P8833-10 mg	-20 °C / 6 months
ITSX	Invitrogen	51500-056	4 °C / 1 year
Polyethylene hanging cell insert for 12-well plates	Millipore	PIRP15R48	Porosity: 1 µm Surface: 1.1 cm <sup>2</sup>
Hydrocortisone	Sigma Aldrich	H0888-1 g	-20 °C / 1 year
Mouse anti-CD31 / PECAM	Chemicon	MAB1393, clone TLD-3A12 (1 mg/mL)	1/200 - fixation PFA 4%
Rabbit anti-Von Willebrand	Chemicon	AB7356	1/200 - fixation PFA 4%
Mouse anti-Desmine	Chemicon	MAB3430	1/200 - fixation PFA 4%

Mouse anti-Vimentine	Invitrogen, Zymed	08-0052 clone V9, (58 µg/ml)	1/50 - fixation PFA 4%
Mouse anti-Claudin-5	Invitrogen, Zymed	35-2500, (500 µg/ml)	1/200 - fixation PFA 4%
Rabbit anti-ZO-1	Invitrogen, Zymed	61-7300 (250 µg/ml)	1/200 - fixation PFA 4%
Rabbit anti-Occludine	Invitrogen, Zymed	71-1500 (250 µg/ml)	1/200 - fixation PFA 4%
Alexa Fluor 488, 594 conjugated secondary antibodies	Invitrogen		1/800
Lucifer Yellow CH, dilithium salt	Sigma Aldrich	L0259	-20 °C
TNF-alpha human	PeptoTech	300-01A	-20 °C
Rat MCP-1 ELISA Kit	PeptoTech	900-K59	4 °C / -20 °C
Mouse anti-P-glycoprotein	Covance, Eurogentec	SIG-38710-1000, clone C219 (1mg/mL)	1/400 - fixation PFA 4% 1/200 (western blot)
Rabbit anti-GLT-1	Abcam	ab41621	1/1,000 (western blot)
Rhodamine 123	Sigma Aldrich	83702	4 °C
Verapamil hydrochloride	Sigma Aldrich	V4629	4 °C
Cyclosporine A	Sigma Aldrich	30024	4 °C
Monoclonal anti-α2 Macroglobulin Receptor (CD91, LRP1) against b-chain of amino acid 4291-4344 within an EGF repeat	American Diagnostica	3501 (100 µg/ml)	1/5 - fixation PFA 4%
Mouse anti-LDLR	R&D systems	AF2255 (200 µg/ml)	1/50 - fixation PFA 4%
Rat transferrin-Cy3	Gentaur	JOR160050	4 °C
DiILDL	Invitrogen	L-3482	4 °C