

Materials List for:

# Nasal Potential Difference to Quantify Trans-epithelial Ion Transport in Mice

Mathilde Beka<sup>1</sup>, Teresinha Leal<sup>1</sup>

<sup>1</sup>Louvain Center for Toxicology and Applied Pharmacology (LTAP), Institut de Recherche Expérimentale et Clinique (IREC), Université Catholique de Louvain

Correspondence to: Teresinha Leal at [Teresinha.Leal@uclouvain.be](mailto:Teresinha.Leal@uclouvain.be)

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## Materials

Name	Company	Catalog Number	Comments
Portex polyethylene tube	Smiths Medical, Hythe, Kent, England CT21 6JL	Portex 800/100/500;2.0mm ID, 3.0 mmOD	to prepare capillary tubes for nasal probe
Electrode cream	Parker, Fairfield, NJ, USA	Redux cream	to build electrode bridges
Ag/AgCl electrodes	Biomedical, Clinton Township, MI, USA	JNS BNT131-1,0	measuring and reference electrodes
amiloride hydrochloride	Sigma, St Louis, MI, USA	A7410	to prepare perfusion solutions
forskolin	Sigma, St Louis, MI, USA	F6886	to prepare perfusion solutions
Knick Portamess voltmeter	Elektronisch Meßgeräte, Berlin, Germany	Portavo 904 pH	to measure potential difference
Paraly SW 112 Software	Elektronisch Meßgeräte, Berlin, Germany	Paraly SW112 software	to capture potential difference data
midazolam	Mylan, Hoeilaart, Belgium	Dormicum 15mg/3ml	to serve as anaesthetic premedication
fentanyl	Janssen Cilag, Berchem, Belgium	Fentanyl-Janssen 0.05 mg/ml	to serve as anaesthetic medication
medetomidine	Orion Pharma, Espoo, Finland	Domitor 1 mg/ml	to serve as anaesthetic medication
droperidol	Janssen Cilag, Berchem, Belgium	Dehydrobenzperidol 2.5 mg/ml	to serve as anaesthetic medication
clonidine	Boehringer Ingelheim Pharma KG, Ingelheim am Rhein, Germany	Catapressan 0.15 mg/ml,	to serve as anaesthetic medication
reference IV catheter	Becton Dickinson, Sandy, UT, USA	24 GA x 0.75 IN, BD Insyte-W	to build electrode bridges
forceps	Fine science Tools, Heidelberg, Germany	Dumont #5, Fine science Tools	to place the nasal catheter
naloxone	Braun Medical, Brussels, Belgium	Narcan, 0.4 mg/ml	to serve as anaesthetic antagonist
atipamezole	Zoetis, Bloomberg, Belgium	Antisedan, 5 mg/ml	to serve as a medetomidine specific antidote
Heating pads	Harvard Apparatus, Holliston, MA, USA	18,8x37,5 cm; 15,5x15,5 cm	to avoid hypothermia during and after the test
Peristaltic pump P1	GE Life Sciences, Uppsala, Sweden	18111091	to perfuse solutions in the mouse nose
cyanoacrylate glue	Loctite, Henkel, Düsseldorf, Germany	super glue 3	to glue together two capillary tubes for nasal probe
NaCl	Sigma, St Louis, MI, USA	RES0926S-A7	Pharma-Grade, USP
CaCl <sub>2</sub> .2H <sub>2</sub> O	Sigma, St Louis, MI, USA	M7304	Pharma-Grade, USP
MgCl <sub>2</sub> .6H <sub>2</sub> O	Sigma, St Louis, MI, USA	1551128	Pharma-Grade, USP
K <sub>2</sub> HPO <sub>4</sub>	Sigma, St Louis, MI, USA	1551139	Pharma-Grade, USP
Na gluconate	Sigma, St Louis, MI, USA	S2054	Pharma-Grade, USP
Ca gluconate	Sigma, St Louis, MI, USA	C8231	Pharma-Grade, USP
MgSO <sub>4</sub> .7H <sub>2</sub> O	Sigma, St Louis, MI, USA	RES0089M-A7	Pharma-Grade, USP
BD needle	Becton Dickinson, Franklin Lakes, USA	BD 26G (0.45x10 mm)	intraperitoneal injection