

Materials List for

# Microsurgical Skills of Establishing Permanent Jugular Vein Cannulation in Rats for Serial Blood Sampling of Orally Administered Drug

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## Materials

Name	Company	Catalog Number	Comments
0.5 mL test tube containing EDTA anticoagulant	Xinkang	N/A	collecting blood samples for hematology test
0.5*20 mm 1.0-mL syringe	KL MEDICAL	N/A	washing or replacing the fluid with saline
0.6*28.5 mm 5.0-mL syringe	HD	N/A	Subcutaneous injection
1.0-mL Blunt tipped syringe (22G)	skillsmodel	S4-PKT22G	Inject the saline and collect blood samples through catheter
1.5 mL sterile microcentrifuge tube	Axygen	MCT-150-C-S	Store sterile catheter lock solution heparinized saline and meloxicam solution
1.5 mL microcentrifuge tubes	Biosharp	BS-15-M	blood collection
1/2 circle cutting 5*12 mm suture needle	skillsmodel	S4-FHZ	Thread the muscle layer to fix the catheter
3/8 circle cutting 7*17 mm suture needle	skillsmodel	S5-FHZ	Suture the incision of rat cortex
6-0 sterile non-absorbable silk suture thread	JUNSHENG	N/A	ligature
75% medical alcohol	HONGSONG	N/A	Disinfection
Adhesive tape	LIUTAI	N/A	positioning the rat
Autoclave sterilization tape	Biosharp	BS-QT-028	Mark sterilized items
Automated blood cell counter	Sysmex	XN-550	Hematology test
Castroviejo micro scissors	skillsmodel	WA1010	Cut the opening in the blood vessel
Centrifuge	Thermo Fisher Scientific	75002402	Plasma preparation
Clean cushion	Qingjie	N/A	Prepare the operation area
Cotton balls	HC	N/A	Wound disinfection and sterilization
Cotton swabs	BEITAGOGO	N/A	Disinfection
Curved hemostat	skillsmodel	N/A	ligature

DN50 Stainless-steel rat restrainer	skillsmodel	S4-RGDQ1	Restrict the movement of rats for easy operation
Ellagic acid	Aladdin	E102710-25g	natural phenol for oral administration
Half-curved forceps	skillsmodel	53072	Lift the muscle layer and tissue, isolate the jugular vein and tie the suture
Heating pad	Warm mate	N/A	preventing heat loss of animal
Heparin sodium	Solarbio	H8060	anticoagulant
Iodophor	Xidebao	N/A	Clean the wound
Iris scissors	skillsmodel	54002	Bluent separation the muscle layer
Isoflurane	RWD	R510-22-16	anaesthesia
LED lamp	EMPERORFEEL	N/A	sugery
Liquid chromatography-mass spectroscopy	Thermo Fisher Scientific	VQF01-20001/ TSQ02-10002	detection of drug concentration in plasma
Meloxicam	Hongqiang	N/A	Analgesic
Normal saline	KL	N/A	Prepara the solution and protect blood vessels from drying out
Pet razor	Codos	3180	Shaving the fur
Phosphate-buffered saline	ZHHC	PW012	Preparation of Ellagic acid solution
PU catheter	skillsmodel	RJVC-PU	Jugular vein cannulation
Small animal operation anesthesia console	RWD	68620	Operation workstation
Spray bottle	Other	N/A	aseptic workstation
Stainless steel plug (22G)	skillsmodel	S4-PKD22G	Plug the catheter to ensure its sealing
Stainless steel trochar	skillsmodel	S\$-PKDGZ	Guide the catheter exteriorization
Sterile lock solution	skillsmodel	SK-FB	lock the catheter to ensure its sterility
Straight feeding needle	skillsmodel	N/A	Oral gavage
Surgical pouch	BKMAM	N/A	container for sterilization of surgical instruments
Surgical scissors	skillsmodel	J21070	Cut incision on rat skin
Vessel dilator balanced forceps	skillsmodel	WA3020	Expand the blood vessel and guide the cannula to slide in
ZS-MV Small animal anesthesia machine	ZSLab	1057003	inducing and maintaining anaesthesia