

Materials List for:

Construction and Evaluation of a Murine Calvarial Osteolysis Model by Exposure to CoCrMo Particles in Aseptic Loosening

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Materials

Name	Company	Catalog Number	Comments
CoCrMo alloy from prosthesis	Waldemar Link GmbH & Co	GEMINI MK II	Raw material to obtain CoCrMo nanoparticles
Fabricated high-vacuum three-electrode direct current	College of Materials Science & Engineering , Nanjing University of Technology		Self designed machine
6 week old male C57BL/6J mice	Model animal research center of Nanjing University	N000013	
100% Ethanol	Nanjing Reagent	C0691514023	Solvent of CoCrMo nanoparticles for transmission electron microscope scanning
1.5 ml Microcentrifuge tubes	Taizhou Weierkang Medical Supplies co., LTD	W603	
Microanalytical balance	Shenzhen Qun long Instrument Equipment Co., LTD	EX125DZH	
Ultrasonic shaker	Shanghai Yuhao scientific instrument co., LTD	YH-200DH	To suspend CoCrMo nanoparticles
Transmission Electron Microscope	FEI	Tecnai G20	
SimplePCI software	Compix Inc.	6.6 version	To calculate the mean diameter and particle size distribution.
High-handed sterilization pan	QIULONGYIQI	KYQL-100DS	To decontaminate endotoxin
Limulus Amebocyte Lysate (LAL) Assay	Charles River	R13025	To detect endotoxin
15 ml Microcentrifuge tubes	Taizhou Suyi Medical	B122	
Phosphate-buffered saline	Boster Biological Technology	AR0030	Solvent of CoCrMo nanoparticles stock solution
Pentobarbital Sodium	Sigma	P3761	To anesthetize mice
Normal saline	SACKLER	SR8572EP-15	To prevent drying of mice eyes
75% Ethanol	Nanjing Reagent	C0691560275	Disinfection
Medical cotton ball	Shuitao	1278298933	Disinfection
Shaver	Kemei	KM-3018	To shave the fur
Scissor	RWD LIFE SCIENCE	S12005-10	To incise skin
Suture	RWD LIFE SCIENCE	F34001-01	To suture skin
Needle holder	RWD LIFE SCIENCE	F33001-01	To suture skin
Needle	RWD LIFE SCIENCE	R14003-12	To suture skin
Vessel forceps	RWD LIFE SCIENCE	F22003-09	To suture skin

Scalpel	RWD LIFE SCIENCE	S31010-01	To harvest calvaria
Tweezers	RWD LIFE SCIENCE	F12006-10	To harvest calvaria
100 μ L pipettes	Eppendorf	3120000240	To embed particles suspension in the calvatias
100 μ L pipette tips	AXYGEN	T-200-Y	To embed particles suspension in the calvatias
5 ml Microtubes	Taizhou Weierkang Medical Supplies co., LTD	W621	
4% Paraformaldehyde	Servicebio	G1101	Fixation
Micro Computed Tomography	SkyScan	SkyScan1176	
Ethylene Diamine Tetraacetic Acid	Servicebio	G1105	Decalcification
Paraffin	Servicebio	#0001	
Paraffin slicing machine	Leica	RM2125RTS	
Glass slide	Servicebio	G6004	
Cover glass	Servicebio	200	
HE staining kit	Servicebio	#1-5	HE staining
Light microscope	Nikon	E200	