

# Platelet-Derived Extracellular Vesicle Functionalization of Ti Implants

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jove.com/video/62781

## Materials

Name	Company	Catalog Number	Comments
0,8 µm syringe filter	Sartorius	16592K	
1.5 mL Centrifuge tube	SPL life sciences	PLC60015	
1mL syringe	BD	303174	
96-well culture plate	SPL life sciences	PLC30096	
Absolut ethanol	Scharlau	ET0006005P	Used to prepare 20 % ethanol with Milli-Q® water
AKTA purifier System	GE Healthcare	8149-30-0014	
Allegra X-15R Centrifuge	Beckman Coulter	392934	SX4750A swinging rotor
Centrifuge 5430 R	Eppendorf	5428000210	F-45-48-11 rotor
Conical Tube, Conical Bottom, 50ml	SPL life sciences	PLC50050	
Cytotoxicity Detection Kit (LDH)	Roche	11644793001	
Disposable Syringes 10 ml	Becton Dickinson	BDH307736	
DMEM Low Glucose Glutamax	GIBCO	21885025	
Dulbecco's PBS (1x)	Capricorn Scientific	PBS-1A	
Fetal Bovine Serum (FBS) Embrionic Certified	GIBCO	16000044	
Filtropur S 0.2 µm syringe filter	Sarstedt	83.1826.001	
HiPrep 16/60 Sephacryl S-400 HR	GE Healthcare	28-9356-04	Precast columns
human umbilical cord-derived mesenchymal stem cells (hUC-MSC)	IdISBa Biobank		
Nanodrop 2000 spectrophotometer	ThermoFisher	ND-2000	
NanoSight NS300 nanoparticle tracking analysis	Malvern	NS300	Device with embedded laser at λ= 532 nm and camera sCMOS
Needle	Terumo	946077135	
Nitric acid 69,5%	Scharlau	AC16071000	
Optima L-100 XP Ultracentrifuge	Beckman Coulter	8043-30-1124	SW-32Ti Rotor

Penicillin-Streptomycin Solution 100X	Biowest	L0022	
pH Test strips 4.5-10.0	Sigma	P-4536	
Platelet Lysate (PL)	IdISBa Biobank		Obtained from buffy coats discarded after blood donation
Polypropylene centrifuge tubs	Beckman Coulter	326823	
Power wave HT	BioTek	10340763	
Screw cap tube, 15 ml, (LxØ): 120 x 17 mm, PP, with print	Sarstedt	62554502	
Sodium hidroxide	Sharlau	SO04251000	
Titanium implants replicas	Implantmedia, SA	NA	Titanium grade IV. Diameter: 6,2 mm. Height: 1,95 mm
Trypsin-EDTA 1 X	Biowest	L0930	
Tryton X100	Sigma	T8787	