

Integrated Bone Formation Through *In Vivo* Endochondral Ossification Using Mesenchymal Stem Cells

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jove.com/video/65573

Materials

Name	Company	Catalog Number	Comments
0.25w/v% Trypsin-1mmol/L EDTA.4Na Solution	FUJIFILM Wako Pure Chemical	209-16941	
Antisedan	Nippon Zenyaku Kogyo		
ascorbate-2-phosphate	Nacalai Tesque	13571-14	
Bambanker	GC Lymphotec	CS-02-001	
basic fibroblastic growth factor	Reprocell	RCHEOT002	
bovine serum albumin	FUJIFILM Wako Pure Chemical	012-23881	7.5 w/v%
Countess Automated Cell Counter with cell counting chamber slides and Trypan Blue stain 0.4%	Invitrogen	C10283	
dexamethasone	Merck	D8893	
Domitor	Nippon Zenyaku Kogyo		
Dormicum	Astellas Pharma		
Dulbecco's Modified Eagle Medium	Merck	D6429	high glucose
Dulbecco's Modified Eagle's Medium/ Nutrient Mixture F-12 Ham	Merck	D6421	
Fetal bovine serum	Hyclone	SH30396.03	
Gentamicin sulfate	FUJIFILM Wako Pure Chemical	1676045	10 mg/mL
Haccpper Generator	TechnoMax	CH-400-5QB	50 ppm hypochlorous acid water
Human Mesenchymal Stem Cells	Lonza	PT-2501	
HyStem Cell Culture Scaffold Kit	Merck	HYS020	
IL-1 β	PeproTech	AF-200-01B	
ITS-G supplement	FUJIFILM Wako Pure Chemical	090-06741	$\times 100$
L-Alanyl-L-Glutamine	FUJIFILM Wako Pure Chemical	016-21841	200mmol/L ($\times 100$)
L-proline	Nacalai Tesque	29001-42	
L-Thyroxine	Merck	T1775	
MSCGM Mesenchymal Stem Cell Growth Medium	Lonza	PT-3001	

BulletKit			
paraffin	FUJIFILM Wako Pure Chemical	165-13375	
PBS / pH7.4 100ml	Medicago	09-2051-100	
TGF- β 3	Proteintech	HZ-1090	
Vetorphale	Meiji Seika Kaisha		
Visiocare Ointment	SAVAVET/SAVA Healthcare		
β -glycerophosphate	FUJIFILM Wako Pure Chemical	048-34332	