

Construction, Characterization, and Regenerative Application of Self-Assembled Human Mesenchymal Stem Cell Aggregates

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Materials

Name	Company	Catalog Number	Comments
0.25% Trypsin-EDTA (1x)	Sigma	T4049	Cell passage
Automatic Dehydration Machine	LEICA	ASP200s	Dehydrate aggregate
Centrifuge	Eppendorf	5418R	Centrifugation
Centrifuge tube	Thermo Nunc	339650	Centrifugation
Culture dish	Thermo	150466	Culture of UCMSCs
Ethanol	SCR	10009218	Dehydrate aggregate
Fatal bovine serum	Sijiqing	11011-8611	Culture of UCMSCs
Forcep	JZ	JD1080	Harvest aggregate
Glutaraldehyde	Proandy	10217-1	Fixation of aggregate
Hematoxylin and Eosin Staining Kit	beyotime	C0105S	HE staining
Hexamethyldisilazane	SCR	80068416	Dry aggregate surface
Hoechst33342	Sigma	14533	Cell nuclei stain
L-glutamine	Sigma	G5792	Culture of UCMSCs
Live/dead Viability/Cytotoxicity Kit	Invitrogen	L3224	Live/dead cell stain
Masson's Staining Kit	ZHC	CD069	Masson Staining
Minimum Essential Medium Alpha basic (1x)	Gibco	C12571500BT	Culture of UCMSCs
Paraffin	Leica	39601006	Tissue embedding
Paraformaldehyde	Saint-Bio	D16013	Fixation of aggregate
PBS (1x)	Meilunbio	MA0015	Resuspend and purify UCMSCs
Penicillin/Streptomycin	Procell Life Science	PB180120	Culture of UCMSCs
Pentobarbital sodium	Sigma	P3761	Animal anesthesia
Polysporin	Pfizer		Prevent eye dry
Scanning Electron Microscope	Hitachi	s-4800	SEM observation

Scissor	JZ	Y00030	Animal surgical incision
Six-well plate	Thermo	140675	Culture of UCMSCs
Stitch	Jinhuan	F603	Close wounds
Suture	Xy	4-0	Close wounds
Thermostatic equipment	Grant	v-0001-0005	Water bath
UCMSCs	Bai'ao	UKK220201	Commercially UCMSCs
Vitamin C	Diyibio	DY40138-25g	Aggregate inducing
Xylene	SCR	10023418	Dehydrate aggregate