

Construction of Adenoviral Vectors using DNA Assembly Technology

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Materials

Name	Company	Catalog Number	Comments
1.5 mL polypropylene microcentrifuge Tube	Axygen	MCT-150-C	Storage of virus
15 mL polypropylene centrifuge tubes	Corning	430790	Storage of virus
150 mm TC-treated culture dishes	Corning	430599	Growth of HEK29E cells
20 K MWCO dialysis cassette	ThermoFisher Scientific	66005	Dialysis of virus
Acetic acid	Amresco	714	Extraction of DNA
Afl II	NEB	R0520	Digestion
Agarose	Takara	5260	Electrophoresis
Age I	NEB	R0552	Digestion
Asc I	NEB	R0558	Digestion
BamH I	NEB	R0136	Digestion
Benzonase Nuclease	Sigma	E8263-25KU	Purification of virus
BsrG I	NEB	R0575	Digestion
Cell lifter	Corning	3008	Scrape off the cells
CsCl	Sigma	C3032	Purification of virus
DNA gel recovery kit	Zymo	D4045	Recovery of DNA
Dulbecco's modified Eagle's medium (DMEM)	Cytiva	SH30022.01	HEK293 cells medium
E.coli TOP10 competent cells	TIANGEN BIOTECH (BEIJING) CO.,LTD.	CB-104	Transformation of assembly product
EcoR V	NEB	R3195	Digestion
EDTA	Thermo Fisher Scientific	R3104	Extraction of DNA
Fetal bovine serum (FBS)	Cytiva	SV30208.02	HEK293 cells culture

Genomic DNA Clean and concentrator kit	Zymo	D4065	Purification of DNA
Glycerol	Shanghai Macklin Biochemical Co., Ltd	G810575	Dialysis of virus
HEK293 cells	ATCC	CRL-1573	Amplification of virus
High-Fidelity DNA Polymerase	NEB	M0491	PCR
Hind III	NEB	R3104	Digestion
Kanamycin sulfate	Amresco	408	Selection of plasmid
Kpn I	NEB	R3142	Digestion
Lambda/HindIII DNA marker	Takara	3403	Electrophoresis
LB broth	BD	240230	LB plate for bacteria
LB medium	Solarbio Life Science	L1010	Medium for bacteria
MgCl ₂	Sigma	63068	Dialysis of virus
Microcentrifuge	Thermo Fisher Scientific	Sorvall Legend Micro 21R	Extraction of DNA
NaCl	Sigma	S5886	Dialysis of virus
Nde I	NEB	R0111	Digestion
NEBuilder HiFi DNA Assembly Master Mix	NEB	E2621	DNA assembly
Nhe I	NEB	R0131	Digestion
Phosphate Buffered Saline	Cytiva	SH30256.01	Washing of cells
Pipette	Thermo Fisher Scientific	Matrix	Aspirate the medium
Plasmid Maxprep Kit	Vigorous Biotechnology Beijing Co., Ltd.	N001	Extraction of DNA
Plasmid Miniprep Kit	TIANGEN BIOTECH (BEIJING) CO.,LTD.	DP103	Extraction of DNA
Pme I	NEB	R0560	Digestion
Potassium acetate	Amresco	698	Extraction of DNA
Protease K	Thermo Fisher Scientific	AM2542	Extraction of DNA
pShuttle-CMV	Stratagene	240007	PCR template
RNase	Beyotime	D7089	Extraction of DNA
Sal I	NEB	R0138	Digestion
Sbf I	NEB	R3642	Digestion
SDS	Amresco	227	Extraction of DNA
Swinging-bucket rotor	HITACHI	S52ST	Purification of virus
T-25 cell flask	Corning	430639	Growth of HEK29E cells
T-75 cell flask	Corning	430641	Growth of HEK29E cells
Transfection reagent	Polyplus-transfection	114-15	Transfection
Transmission electron microscope	FEI	TECNAI 12	Obsevation of virus
Tris-HCl	Amresco	234	Dialysis of virus
Ultracentrifuge	HITACHI	Himac CS120GXII	Purification of virus