

Materials List for

Isolation of Adeno-associated Viral Vectors Through a Single-step and Semi-automated Heparin Affinity Chromatography Protocol

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Materials

Name	Company	Catalog Number	Comments
10% povidone-iodine	Medline	MDS093943	
12-well plates	Thermo Scientific	11889684	
24-well plates	VWR	734-2325	
4',6-diamidino-2-phenylindole (DAPI)	Invitrogen	D1306	
96-well Stunner plate	Unchained Labs	701-2025	96-well quantification plate for the consecutive ultraviolet-visible light absorption, static light scattering, and dynamic light scattering analysis of rAAV samples
AAVpro Titration Kit (for Real-Time PCR) Ver.2	Takara	6233	For determining the titer of AAV using RT-qPCR. This kit contains DNase I, Lysis Buffer, Dilution Buffer, positive control, Taq II mix, primer forward, primer reverse, water
Acetic acid glacial	Fisher Chemical	A/0360/PB17	
ÄKTA pure 25	Cytiva	29018224	FPLC system controlled by UNICORN software, version 6.3
Alkaline phosphatase-linked goat anti-mouse	Invitrogen	31328	
Amicon ultra-0.5 centrifugal filter unit	Merck Millipore	UFC5100	
Amicon ultra-15 centrifugal filter unit	Merck Millipore	UFC9100	
Benzonase Nuclease	Merck Millipore	E1014	
Bromophenol blue	Sigma-Aldrich	B0126	
CFX96 Real-Time PCR detection system	Biorad	184-5096	

ChemiDoc Touch Imaging System	Bio-Rad Laboratories	1708370	
Chicken polyclonal anti-GFP primary antibody	Abcam	ab13970	
Coomassie Blue G250	Fisher Chemical	C/P541/46	
Dithiothreitol (DTT)	Fisher Bioreagents	BP17225	
DMEM	Sigma-Aldrich	D5796	
ECF Substrate for Western Blotting	Cytiva	RPN5785	
FastDigest SmaI	Thermo Scientific	FD0663	
FEI-Tecnaï G2 Spirit Biotwin	FEI	Biotwin	Transmission electron microscope
Fetal bovine serum	Biowest	S1810	
Fluorescence mounting medium	Dako	S3023	
Formvar-carbon coated 200 mesh grid	TAAB Laboratories Equipment	F077/025	
Gas evacuation apparatus	RWD	R546W	
Glycerol	Fisher BioReagents	10021083	
Goat polyclonal anti-chicken antibody, Alexa Fluor 488	Invitrogen	A-11039	
Hamilton needle 30G, Small Hub RN Needle, 25 mm, PST3	Hamilton	7803-07	
Hamilton syringe (10 µL)	Hamilton	7653-01	
HEK293T	American Type Culture Collection	CRL-11268	
HiTrap Heparin HP 1 x 5 mL	Cytiva	17040701	Pre-packed heparin column
HiTrap Heparin HP 5 x 1 mL	Cytiva	17040601	Pre-packed heparin column
Immobilon-P PVDF Membrane	Merck Millipore	IPVH00010	
Isoflurane	Braun	469860	
Ketamine	Dechra Pharmaceuticals	N/A	Nimatek
Low-retention microcentrifuge tubes (2 mL)	Fisher Scientific	11906965	
Lunatic & Stunner Client software	Unchained Labs	N/A	Client analysis software version 8.0.1.235. Software for the consecutive ultraviolet-visible light absorption, static light scattering, and dynamic light scattering analysis of rAAV samples
Methanol	Fisher Chemical	M/4000/FP21	
Mouse monoclonal anti-AAV, VP1, VP2 antibody (A69)	American Research Products	03-61057	
Mouse monoclonal anti-AAV, VP1, VP2, VP3 antibody (B1)	American Research Products	03-61058	
Neuro2a	American Type Culture Collection	CCL-131	
Normal goat serum	Gibco	16210064	
NucleoBond Xtra Maxi EF	Macherey-Nagel	12738422	
NZYS Colour Protein Marker II	NZYtech	MB09002	
pAAV-CMV-scGFP	Addgene	32396	Addgene plasmid # 32396; http://n2t.net/addgene:32396 ; RRID:Addgene_32396
pAAV-CMV-ssGFP	Addgene	105530	Addgene plasmid # 105530; http://n2t.net/addgene:105530 ; RRID:Addgene_105530
pAAV2/9n	Addgene	112865	Addgene plasmid # 112865; http://n2t.net/addgene:112865 ; RRID:Addgene_112865
Paraformaldehyde	Acros Organics	10342243	
PBS	Fisher BioReagents	BP2438	

Penicillin-streptomycin	Gibco	15140-122	
Pluronic F-68 Non-ionic Surfactant (100x)	Gibco	24040032	
Polyethylenimine MAX, MW 40,000	Polysciences Europe	24765	
R500 Series Compact Small Animal Anesthesia Machine - Isoflurane	RWD	N/A	
Sample Inlet Valve V9-IS	Cytiva	29027746	
Sample pump P9-S	Cytiva	29027745	
Sodium azide	Sigma-Aldrich	S2002	
Sodium chloride	Fisher Scientific	10428420	
Sodium deoxycholate	Sigma-Aldrich	D6750	
Sodium dodecyl sulfate (SDS)	Fisher Bioreagents	BP166	
Sterile PVDF syringe filter	Fisher Scientific	15191499	
Stunner Platform	Unchained Labs	700-2002	Equipment for the consecutive ultraviolet-visible light absorption, static light scattering, and dynamic light scattering analysis of rAAV samples
Superloop 150 mL	Cytiva	18-1023-85	
Superloop 50 mL	Cytiva	18-1113-82	
SURE 2 supercompetent cells	Stratagene, Agilent Technologies	HPA200152	
Treated culture dishes	Corning	734-1711	
Tris base	Fisher BioReagents	BP152	
Tris hydrochloride	Fisher BioReagents	BP153	
Triton X-100	Sigma-Aldrich	T8787	
Trypsin-EDTA	Gibco	25200-072	
Wheat Germ Agglutinin (WGA) conjugated with Alexa Fluor 633	Invitrogen	W21404	
Xylazine	Dechra Pharmaceuticals	N/A	Sedaxylan
Zeiss Axio Observer Z1	Carl Zeiss Microscopy GmbH	N/A	Inverted fluorescence microscope equipped with an EC Plan-Neofluar 10x/0.30 objective and a Plan-Apochromat 40x/0.95 objective
Zeiss Axio Scan.Z1	Carl Zeiss Microscopy GmbH	N/A	Slide scanner fluorescence microscope equipped with a Plan-Apochromat 20x/0.8 objective
Zeiss LSM 710	Carl Zeiss Microscopy GmbH	N/A	Inverted confocal microscope equipped with a Plan-Apochromat 40x/1.4 Oil DIC objective
μ-Slide 8 well Ibidi	Ibidi	80826	8-well chamber slide