

Materials List for:

Development of Cell-type specific anti-HIV gp120 aptamers for siRNA delivery

Jiehua Zhou¹, Haitang Li¹, Jane Zhang², Swiderski Piotr³, John Rossi¹

¹Department of Molecular and Cellular Biology, Beckman Research Institute of City of Hope

²Graduate School of Biological Sciences, Beckman Research Institute of City of Hope

³Shared Resource-DNA/RNA Peptide, Beckman Research Institute of City of Hope

Correspondence to: John Rossi at Jrossi@coh.org

URL: <https://www.jove.com/video/2954>

DOI: [doi:10.3791/2954](https://doi.org/10.3791/2954)

Materials

Name	Company	Catalog Number	Comments
MF-Millipore membrane filter	EMD Millipore	HAWP01300	Pore size 0.45 µm
Swinnex Filter holder	EMD Millipore	SX0001300	13 mm diameter
QIAquick Gel Extraction Kit	Qiagen	28706	DNA purification
Microcon YM-30 column	EMD Millipore	42410	RNA concentration
Bio-spin 30 column	Bio-Rad	732-6250	RNA purification
Taq PCR DNA polymerase	Sigma-Aldrich	D1806	
ThermoScript RT-PCR system	Invitrogen	11146-024	
DuraScribe T7 transcription Kit	Epicentre Biotechnologies	DS010925	
dNTP for PCR	Roche Group	1 581 295	
Ribonucleic acid, transfer from E.coli	Sigma-Aldrich	R1753	tRNA competitor
HIV-1 _{Ba-L} gp120 protein	National Institutes of Health	4961	Target protein
Silencer siRNA labeling kit - Cy3	Ambion	1632	
Acid phenol/chloroform 5/1 solution (pH 4.5)	Ambion	AM9720	
Chloroform/Isopropanol 24/1 solution	Sigma-Aldrich	C0549	
Calf intestinal phosphatase (CIP)	New England Biolabs	M0290L	
T4 polynucleotide kinase	New England Biolabs	M0201L	
Glycogen	Roche Group	10 901 393 001	RNA precipitation
Gamma-P ³² -ATP	MP Biomedicals	013502002	Radiactivity
40% AccuGel 19:1	National Diagnostics	EC-850	
10xTBE	National Diagnostics	EC-860	
N,N,N,N'-Tetramethylethylenediamine (TMEMD)	Sigma-Aldrich	T9281	
Ammonium persulfate (APS)	Sigma-Aldrich	A3678	
L-methioine sulfoximine	Sigma-Aldrich	M5379-250 mg	
RPMI Media 1640	Invitrogen	11835-030	
Sodium Bicarbonate solution, 7.5% w/v	Invitrogen	25080-094	
Minimum Essential Medium (MEM) (10')	Invitrogen	11430-030	
MEM non-essential amino acid (100')	Invitrogen	11140-050	
TA cloning kit with pCR 2.1	Invitrogen	K2040-01	