

Materials List for:

# Generation of Cancer Cell Clones to Visualize Telomeric Repeat-containing RNA Expressed from a Single Telomere in Living Cells

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URL: <https://www.jove.com/video/58790>

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## Materials

Name	Company	Catalog Number	Comments
AGS cells	-	-	Gift from Christian Baron (Université de Montréal).
F12K Nut Mix 1X	GIBCO	21127022	Culturing medium for AGS cells
L-Glutamine	CORNING	MT25005CI	Component of cell culturing medium
Penicillin Streptomycin Solution	CORNING	30-002-CI	Component of cell culturing medium
Fetal Bovine Serum	Sigma Aldrich	F2442	Component of cell culturing medium
DMEM 1X	GIBCO	21068028	culturing medium for phoenix cell
CaCl <sub>2</sub>	Sigma Aldrich	C1016	used in phoenix cell transfection
HEPES	Sigma Aldrich	H3375	used in phoenix cell transfection (HBS solution)
KCl	Sigma Aldrich	P9333	used in phoenix cell transfection (HBS solution)
Dextrose	Sigma Aldrich	D9434	used in phoenix cell transfection (HBS solution)
NaCl	Sigma Aldrich	S7653	used in phoenix cell transfection (HBS solution) and retrovirus precipitation
Na <sub>2</sub> HPO <sub>4</sub>	Sigma Aldrich	S3264	used in phoenix cell transfection (HBS solution)
TRYPsin EDTA SOLUTION 1X	CORNING	59430C	used in cell split
DPBS 1X	GIBCO	14190250	Dulbecco's Phosphate Buffered Saline
DMSO	Sigma Aldrich	D8418	Component of cell freezing medium (80% FBB and 20% DMSO)
G-418 Disulphate	Formedium	G4185	selection drug for
Gelatin solution Bioreagent	Sigma Aldrich	G1393	cotaing of 96 well DNA plate and freezing plate
Tris-base	Fisher BioReagents	10376743	Component of Cell lysis buffer for genomic DNA extraction
EDTA	Sigma Aldrich	E6758	Component of Cell lysis buffer for genomic DNA extraction
SDS	Sigma Aldrich	71729	Component of Cell lysis buffer for genomic DNA extraction
Proteinase K	Thermo Fisher	AM2546	Component of Cell lysis buffer for genomic DNA extraction

RNAse A	Thermo Fisher	12091021	RNA degradation during DNA extraction
Agarose	Sigma Aldrich	A5304	DNA gel preparation
Atlas ClearSight	Bioatlas	BH40501	Stain reagent used for detecting DNA and RNA samples in agarose gel
ethanol	Fisher BioReagents	BP28184	DNA precipitation
Sodium Acetate	Sigma Aldrich	71196	Used for DNA precipitation at a 3M concentration pH5.2
Wizard SV Gel and PCR clean-Up system	Promega	A9282	Extraction of PCR fragments from agarose gel during PCR screening of neomycin positive clones
Trizol	AMBION	15596018	Organic solvent used for RNA extraction
Dnase I	THERMO SCIENTIFIC	89836	degradation of genomic DNA from RNA
dNTPs mix	Invitrogen	10297018	used in RT and PCR reactions
DTT	Invitrogen	707265ML	used in RT reactions
diethyl pyrocarbonate	Sigma Aldrich	D5758	used to inactivate RNases in water (1:1000 dilution)
Ribolock	Thermo Fisher	EO0381	RNase inhibitor
MOPS	Sigma Aldrich	M9381	preparation of RNA gel
Paraformaldehyde	Electron Microscopy Sciences	15710	preparation of denaturing RNA gel (1% PFA in 1x MOPS)
Superscript III Reverse transcriptase	Invitrogen	18080-093	Retrotranscription reaction
Pfu DNA polymerase (recombinant)	Thermo Scientific	EP0501	PCR reaction
2X qPCR BIO SyGreen Mix Separate-ROX	PCR BIOSYSTEMS	PB 20.14	qPCR reaction
Cre-GFP adenovirus	<a href="https://medicine.uiowa.edu/vectorcore">https://medicine.uiowa.edu/vectorcore</a>	1174-HT	used to infect TERRA-MS2 clones in order to remove the neomycin gene
Sodium Butyrate	Sigma Aldrich	B5887	used to promote retrovirus particles production in phoenix cells
PEG8000	Sigma Aldrich	89510	Precipitation of retrovirus particles
35µ-Dish Glass Bottom	Ibidi	81158	used in live cell imaging analyses of TERRA-MS2 clones