

Materials List for:

Isolation and Detection of Telomeric DNA C-Circles from Mammalian Cells

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Materials

Name	Company	Catalog Number	Comments
Microcentrifuge			Any microcentrifuge will work, eg. Eppendorf 5424
Nanodrop	Thermo Scientific	2000	Any DNA quantitation spectrophotometer is sufficient
Water bath			A heat block can be used in place of a water bath for incubations
Thermocycle			Any thermocycler is sufficient, e.g. BioRad C1000 touch
Dot blot apparatus	BioRad	1706545	
UV Crosslinker			Any UV Crosslinker is sufficient, e.g. Boekel Scientific 234100
Hybridization bags			Any boilable heat seal pouch will work, e.g. Kapak Sealkpak
Hybridization oven			Any hybridization oven is sufficient, e.g. Thermo Scientific Shake 'n' Stack
Glass hybridization bottle			Any hybridization bottle that fits the rotisserie in the hybridization oven, e.g. Wheaton borosilicate glass hybridization bottle
Autoclave			
Chemiluminescent imager			Any chemiluminescence imager is sufficient, e.g. BioRad ChemiDoc XRS+with Image Lab software
Impulse heat sealer			Any impulse heat sealer is sufficient, e.g. FS-305 impulse sealer
D-PBS (1X)	Invitrogen	14190-144	Any PBS can be used to wash cell pellet
0.05% Trypsin-EDTA	Thermo Scientific	25300062	Any cell dissociation reagent is sufficient, use reagent appropriate for the cell line
QIAmp DNA Mini kit	Qiagen	51304	
Alu1	New England Biolabs	R0137L	
Mbo1	New England Biolabs	R0147L	
CutSmart Buffer (10X)	New England Biolabs	B7204S	Buffer is normally supplied with restriction enzymes
PureLink Rnase A	Invitrogen	12091-021	
GeneJET PCR Purification Kit	Thermo Scientific	K0701	Qiagen QIAquick PCR purification kit can be used without effect on assay outcome
Bovine Serum Albumin	Sigma	A2153	Any BSA is sufficient

phi29 DNA polymerase	New England Biolabs	MO269L	
phi29 DNA pol reaction buffer (10X)	New England Biolabs	BO269S	Buffer is normally supplied with polymerase
Tween-20	Sigma	P1379	Any Tween 20 is sufficient
dATP solution (100mM)	Invitrogen	55082	
dTTP solution (100mM)	Invitrogen	55085	
dGTP solution (100mM)	Invitrogen	55084	
Sodium Chloride	Sigma	S5886	Any sodium chloride is sufficient
Sodium citrate tribasic dihydrate	Sigma	S4641	
Chromatography paper	Fisherbrand	05-714-4	Any chromatography filter paper is sufficient
Amersham Hybond-XL	GE Healthcare	RPN 203 S	
ULTRAHyb Ultrasensitive Hybridization buffer	Invitrogen	AM8670	Warm in water bath to 65° C before use
Sodium dodecyl sulfate	Fisher Scientific	BP166	Any SDS is sufficient
Telomere probe (5' - CCCTAACCCTAACCCTAACCCTAA - 3')	Invitrogen		25nmoles; standard desalting; resuspend at 250µM
DIG oligonucleotide 3' - End labeling kit, 2nd generation	Roche	3353575910	Kit contains 5X reaction buffer, CoCl ₂ solution, DIG-ddUTP solution and recombinant terminal transferase
EDTA	Sigma	6381-92-6	Any EDTA is sufficient
Maleic Acid	Sigma	110-16-7	Any maleic acid is sufficient
Blocking Reagent	Roche	11096176001	
Tris-HCl	Sigma	77-86-1	Any Tris-HCl is sufficient
anti-Digoxigenin-AP Fab fragments	Roche	11093274910	
CDP-Star	Roche	11759051001	