April 12, 2015

DNA ALIQUOTING AND SHIPPING FOR QPCR TELOMERE LENGTH MEASUREMENT

1. PURPOSE

This protocol describes DNA aliquoting and shipping for qPCR telomere length measurement.

2. MATERIALS/REAGENTS/EQUIPMENT

Material	**Vendor**	**Cat#**
96 well Hard-Shell® Thin-Wall plates	Biorad	HSP-9901
Microseal® 'F' Foil	Biorad	MSF-1001
Ziplock bags	varies	N/A
Table top centrifuge	varies	N/A
-80 freezer	varies	N/A
Dry ice	varies	N/A
Box for shipping	varies	N/A

3. PROCEDURES

3.1. Label the 96 well plates with the study name, PI's name, plate number and date.

3.2. Pipette 30 ul of DNA at 30 ng/ul (DNA concentration between 10-30ng/ul is acceptable.) in 96 well plates (Biorad Hard-Shell® Thin-Wall 96-Well Skirted PCR Plates #HSP-9901).

3.3. Seal the plates with foil seal (**Microseal® 'F' Foil MSF-1001 from BioRad).** Spin the plates at 1000 rpm for 2 minutes in a table top centrifuge at 4 degree.

3.4. Store the plates at -80°C until ready to ship. DNA samples in 96 wells plates should be placed inside ziplock bags and shipped on dry ice overnight to the address at the end of this protocol.

NOTE: For partial plates, please fill the wells in columns (i.e. A1-H1, then A2-H2 etc.).

3.5. Contact the Blackburn lab (jue.lin@ucsf.edu) to arrange for shipment.

3.6. Provide the following information to the Blackburn lab
-protocol used for DNA purification
-final buffer the DNA is in
-how the DNA was quantified
-sample manifest

3.7. Shipping address:

April 12, 2015

Dr. Jue Lin/Elizabeth Blackburn lab
Room S316, Genentech Hall, Mission Bay, UCSF
600 16th Street, San Francisco, CA 94158
Lab phone: 415-476-7284
Cell: 650-283-5516
Fax: 415-514-4145
Email: jue.lin@ucsf.edu

APPENDIX

A. DNA purification

We recommend using QIAGEN's QIAamp DNA Blood Mini Kit (cat# 51104 or 51106).

B. RNASE TREATMENT

We recommend adding RNase A in genomic DNA purification. DNase-free RNase A can be purchased from QIAGEN (Cat #19101).

C. DNA QUANTIFICATION

We recommend using PicoGreen method (Quant-iT™ PicoGreen ® dsDNA Kits, Cat #P7589, P11596, P7581 or P11495, Invitrogen) to measure DNA concentration as Picogreen only measures double stranded DNA, not residual single stranded RNA. OD260/OD280 will measure both DNA and RNA and will potentially give higher readings. If you used RNase A in genomic DNA purification, it is unlikely you will have significant amount of RNA. If RNase A is not used in your genomic DNA preparation and the DNA is quantified by OD260/OD280 spectrophotometry, please provide DNA samples with a minimal concentration of 20ng/ul.

REVISION HISTORY

DATE	AUTHOR	REVISION #	REVISION REASON
Oct 1, 2104	Jue Lin	A	Initial Release
April 12, 2015	Jue Lin	B	Reformatted the SOP