

**BLACKBURN LAB 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**

<b>Material</b>	<b>Vendor</b>	<b>Cat#</b>
96 well Hard-Shell® Thin-Wall plates	Biorad	HSP-9901
Microseal® 'F' Foil	Biorad	MSF-1001
Cardboard box	varies	N/A
Tabletop centrifuge	varies	N/A
-80 freezer	varies	N/A
Dry ice	varies	N/A
Dry ice shipper	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 cardboard boxes 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](mailto: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:

Dr. Jue Lin/Elizabeth Blackburn lab  
Room S316, Genentech Hall, Mission Bay, UCSF  
600 16<sup>th</sup> 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) for whole blood, buffy coat, PBMCs, isolated immune cells and in vitro cultured cells.

We recommend using Beckman Coulter's DNAdvance kit (cat# A48705) for saliva collected in DNA Genotek's Oragene kits (self-collection and assisted collection).

### **B. RNASE TREATMENT**

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

### **C. DNA QUALITY CRITERIA**

Our DNA quality criteria are OD260/OD280 between 1.7 to 2.0 and OD260/OD230 >1.0. Minimal DNA concentration is 10 ng/ul.