



RNA Specifications for Quantitative Gene Expression

1 Sample Quality

- 1.1. RNA provided should be either total RNA or mRNA of sufficient quality to be reversed transcribed into cDNA.
- 1.2. RNA purity: OD_{260/280} ratio of 1.8 to 2.1.
- 1.3. RNA concentration: 100 ng/uL or higher.

2 Sample Quantity

- 2.1 RNA minimum requirement for cDNA synthesis: 100 – 1000 ng.
- 2.2 RNA minimum requirement per well datapoint: 5 ng
- 2.3 If less RNA is available, please discuss prior to study agreement.

3 Sample Format

3.1 Tubes:

- 3.1.1 Samples can be provided in sealable, screw-top, or snap-top tubes.

3.2 Plates:

- 3.2.1 Samples can be provided in 96 well plates.

3.2.2 Plate type:

- 3.2.2.1 Sample Volume (5-200 uL): 96 Standard Sterile Polypropylene NUNC Plate, Cat. No: 249946 (www.nuncbrand.com) in conjunction with 96 Nunc sterile cap mat, Cat. No: 276000 (www.nuncbrand.com) .

4 Shipping

- 4.1 If shipping sample tube (s), freeze sample tubes first, then, place the tube (s) inside a cardboard box (es) and sealed the box (es).
- 4.2 If shipping sample plate (s), ensure that the plate (s) are completely sealed and frozen and covered in bubble wrap before placing in shipping boxes.
- 4.3 Cardboard shipping boxes should contain a styrofoam box inside where sample plates or tube box (es) should be placed in a horizontal orientation. If necessary, use spacers (Styrofoam, paper, or cardboard) to fill empty spaces.
- 4.4 For shipments within the United States:
 - 4.4.1 Ship samples frozen with at least 5 kg of dry ice.
 - 4.4.2 Ship on Monday or Tuesday and verify that samples will be delivered to the Genetic Services Laboratory within the same week of shipment by Friday as the latest.
- 4.5 For international shipments:

- 4.5.1 Ship samples frozen with at least 10 kg of dry ice.
- 4.5.2 Ship preferably on Monday and verify that samples will be delivered on a working day, Monday thru Friday.
- 4.6 Do not ship for receipt on any standard U.S. holidays.
- 4.7 E-mail the customer liaison (services@sequenom.com) before shipping to confirm shipping date. Do not ship samples until Sequenom has confirmed shipping date.
- 4.8 E-mail the customer liaison (services@sequenom.com) on the day the samples are shipped and provide the shipping company name and the tracking number.
- 4.9 Ship to:
- SEQUENOM, Inc.
Attn: Genetic Services Laboratory
3595 John Hopkins Court
San Diego CA, 92121
Phone 858-202-9035

5 Sample File Specifications

- 5.1 E-mail an excel file with the following information and format to the customer liaison, (services@sequenom.com) unless stated otherwise within contract. A *Sample File Template* can be provided upon request.
- 5.2 Tube required information: Tube ID or Tube Barcode, Sample ID or Barcode, Box Well ID in three digits (A01, A02, etc.) proceeding left to right, top to bottom, sample concentration in ng/uL, sample volume in uL and comments.

Tube Sample File Example:

Tube_ID	Sample_ID	Box Well_ID	Conc_(ng/uL)	Volume_(uL)	Comments
ABCD1	1234	A01	100	8	
ABCD1	1235	A02	155	8	
ABCD1	1236	A03	200	6	

- 5.3 Plate required information: Plate ID or Plate Barcode, Sample ID or Barcode, Well ID in three digits (A01, A02, etc.) proceeding left to right, top to bottom, sample concentration in ng/uL, sample volume in uL and comments.

Plate Sample File Example:

Plate_ID	Sample_ID	Well_ID	Conc_(ng/uL)	Volume_(uL)	Comments
ABCD1	1234	A01	100	10	
ABCD1	1235	A02	100	9	
ABCD1	1236	A03	100	10	

- 5.4 NOTE: Sequenom will not accept samples without an electronic sample information file.
- 5.5 E-mail the customer liaison (services@sequenom.com) for any modification of sample information format.