

## QuantiGene® Sample Processing Kit

### Fresh or Frozen Animal Tissues

### Product Insert

**About Sample Processing Kits** Panomics' Sample Processing Kits are designed for use with QuantiGene Assay Kits and Probe Sets or QuantiGene Plex Assay Kits and Plex Sets for quantitation of target-specific RNA directly from cultured cell lysates, whole blood lysates, animal tissue homogenates, or FFPE tissue homogenates.

**About this Kit** This QuantiGene Sample Processing Kit for Tissue Homogenates contains reagents and instructions for the preparation of tissue homogenates from fresh or frozen tissues for use in QuantiGene and QuantiGene Plex assays. For more information, refer to the appropriate *QuantiGene Reagent System User Manual*.

#### Contents and Storage

Cat. No.	QS0104	QS0105	QS0106	
Kit Size	10 Samples <sup>a</sup>	25 Samples <sup>a</sup>	100 Samples <sup>a</sup>	
Component	Quantity	Quantity	Quantity	Storage
Homogenizing Solution	20 mL	50 mL	200 mL	15–30 °C
Proteinase K <sup>b</sup> (50 µg/µL)	12 µL	30 µL	120 µL	–20 °C

a. A sample is defined as 10 mg of tissue.

b. Place on ice during use.

#### Shelf Life

Kit components have a shelf life of 12 months from the date of receipt.

#### Materials Required but not Supplied

Item	Source
RNase Zap®	Ambion P/N 9780
RNAlater® <sup>a</sup> or RNAlater®-ICE <sup>b</sup>	Ambion P/N 7020 or 7030
One of the following: Dounce tissue grinder TissueLyser or equivalent	Fisher P/N 06434 Qiagen P/N 69982

a. For preparing fresh tissue.

b. For preparing frozen tissue.

#### Safety Warnings and Precautions

All chemicals should be considered potentially hazardous. We recommend that this product and its components be handled by those trained in laboratory techniques and used according to the principles of good laboratory practice.

#### Intended Use

For research use only. Not for use in diagnosis of disease in humans or animals.

## Preparing Tissue Homogenates

**About this Procedure** This procedure is for preparing tissue homogenates from 10 mg fresh or frozen animal tissue.

**Before you Start** Treat all surfaces with RNaseZap according to the manufacturer's recommendations.

**Preparing Tissue Homogenates** To prepare tissue homogenates:

Step	Action
1	Place tissue in 5 volumes of RNALater or RNALater-ICE, and incubate according to the manufacturer's recommendations: <ul style="list-style-type: none"> <li>◆ Fresh tissue in RNALater at 4 °C for 16 hours</li> <li>◆ Frozen tissue in ice-cold RNALater-ICE at -20 °C for 16 hours.</li> </ul>
2	Prepare an appropriate volume of Working Homogenizing Solution by combining per 10 mg tissue: <ul style="list-style-type: none"> <li>◆ 300 µL Homogenizing Solution</li> <li>◆ 1 µL Proteinase K</li> </ul> Vortex briefly to mix.
3	Completely remove all excess RNALater by blotting tissue on laboratory wipes. <p><b>Note</b> Carry over of RNALater or RNALater-ICE may interfere with QuantiGene or QuantiGene Plex assays.</p>
4	Homogenize the tissue using one of the following methods: <p>Method 1, Dounce tissue grinder:</p> <ol style="list-style-type: none"> <li>a. Transfer tissue and Working Homogenizing Solution to the Dounce tissue grinder and homogenize until no visible particles remain.</li> <li>b. Transfer homogenate to a microfuge tube.</li> </ol> <p>Method 2, TissueLyser:</p> <ol style="list-style-type: none"> <li>a. Transfer tissue and Working Homogenizing Solution to a 2 mL microfuge tube.</li> <li>b. Add 1–2 metal beads, then assemble tubes into TissueLyser according to the manufacturer's recommendations.</li> <li>c. Homogenize tissue at 25 Hz for 1–2 minutes.</li> <li>d. Allow the sample to cool to room temperature, then repeat as necessary until no visible particles remain.</li> </ol>
5	Incubate the homogenized sample at 65 °C for 30 minutes. Vortex at maximal speed for 15 seconds once every 10 minutes during this incubation. <p><b>Note</b> Some tissues such as connective tissues require longer incubation (up to 18 hours) to reduce viscosity.</p>
6	Centrifuge the sample at 16,000 x g for 5 minutes to pellet debris, then transfer the supernatant to a new microfuge tube.
7	Use tissue homogenate immediately in a QuantiGene or QuantiGene Plex assay, or store at -80 °C for later use.

**Contacting  
Panomics**

For technical questions, please contact our technical support group by telephone at 1-877-726-6642 option 3, or email at [techsupport@panomics.com](mailto:techsupport@panomics.com) (US and Canada). In Europe, contact [techsupport\\_europe@panomics.com](mailto:techsupport_europe@panomics.com). For an updated list of FAQs and product support literature, visit our website at [www.panomics.com](http://www.panomics.com).

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Panomics Inc., 6519 Dumbarton Circle, Fremont, CA 94555, Tel. (877) 726-6642