



**PI:** Nic Wheeler UW Eau Claire

**Client:**

**Funding No. Direct Invoice**  
**Sub.No. M007087**

**Tissue RNA Extraction** (miracidia (first larval stage) of *Schistosoma mansoni*)

Client Notes- 9 samples that were flash frozen in liquid nitrogen and stored in Trizol at -80C. Each sample includes 500-1200 miracidia (first larval stage) of *Schistosoma mansoni*. Each miracidium has 350-400 cells, so we may be dealing with a low-input situation. The genome size is about 400 Mb ([link to the database](#)). Our goal is to identify differentially expressed genes from different populations of miracidia (two populations, >3 biological replicates each)

**7/23/2024 SMSB**

Client will be sending samples in 1mL Trizol, on dry ice, in standard 1.5mL microfuge tube  
Suggested RNA extraction protocol provided

**7/24/2024 SMSB**

Approved service request for RNA Extraction & RNA Seq with sample being shipped next week

Date	Number of miracidia	Tissue Source	Label
4/18/24	600	Liver	Sma_NMRI_Mira_Liv-01
6/19/24	730	Liver	Sma_NMRI_Mira_Liv-02
7/11/24	350	Liver	Sma_NMRI_Mira_Liv-03
7/18/24	1200	Liver	Sma_NMRI_Mira_Liv-04
4/18/24	600	Intestine	Sma_NMRI_Mira_Int-01
6/6/24	152	Intestine	Sma_NMRI_Mira_Int-02
7/11/24	200	Intestine	Sma_NMRI_Mira_Int-03
7/18/24	450	Intestine	Sma_NMRI_Mira_Int-04

**7/30/2024 LW**

Samples (8) received by shipment on dry ice. All samples were frozen in ~1mL of trizol on arrival. Samples stored at 4C.

**RNA Extraction-** Organic homogenization w/ Qiagen RNeasy Kit w/ DNase treatment

**8/13/2024 LW**

Working in the biohood in room 2330A, samples transferred to 2mL Safelock tubes with 5mm stainless steel bead

**RNA Extraction (8) – Batch 01**

**Nucleic Acid Extraction Room2330A**

Samples homogenized by TissueLyzer at 30Hz for 2min for 1 cycle, samples were allowed to rest at on ice for 5 minutes. Chloroform was added to samples, organic extraction performed.

Qiagen RNeasy Micro Kit (lot#172040952) used for cleanup.

On-column DNase treatment (Lot#178011710)

Sample eluted w/ 14uL nuclease-free water added to column

**8/13/2024 LW**

**QC-** each assayed on a Nanodrop One-  $A_{260}/A_{280} < 1.8$  and phenol contamination

Assayed samples on Agilent 4200 TapeStation- RNA assayed on a High Sensitivity RNA screenTape post denaturation

Profile comments added to EXCEL sheet

**A visible measure of a core's impact is made through proper acknowledgement of usage in publications. To acknowledge our cores, please use the following statement:**

***The author(s) utilized the University of Wisconsin – Madison Biotechnology Center’s Gene Expression Center Core Facility (Research Resource Identifier - RRID:SCR\_017757) for RNA Extraction & QC services.***