Genotyping Submission FAQs

MCW Genotyping Core

1. What kind of tissue can be submitted?

Rodent tissue (ear punch, tail clip, toe clip, organ, etc.). Tissue size should be no larger than 1-2mm.
*Any larger tissues will need to be cut down. Additional preparation charges will be added at invoicing.

2. How should tissue samples be stored before bringing them to the Core?

Each individual tissue should be stored in a 1.2-1.7ul standard conical Eppendorf-style screw-cap tube. If you do not have screw-cap tubes, flip-cap tubes are acceptable. Please do NOT use a taller or wider tube that will not fit into a standard benchtop microfuge. Store at -20 or -80.

3. How should samples be labeled?

Each sample tube must be clearly and permanently labeled with a sample ID. The use of small labels (~0.5" x 1.75") or permanent marker on tubes and caps is preferred. Please do NOT use tape on or around tubes.

4. How can genotyping requests be submitted?

A Genotyping Submission Form must be filled out and emailed to the Genotyping Core at Genotyping.Core@mcw.edu before samples are dropped off at the core. Please download a copy of the Submission Form and submit it as an excel file.

5. How should the Genotyping Submission Form be filled out?

The first two tabs of the Genotyping Submission Form must be completed.

[Tab 1 – Sample Submission Form]
Contact and billing information, along with basic information about the samples.

[Tab 2 – Sample Submission List]
Tissue sample IDs that match the tube label entered in the first column. Assay(s) to be run entered in the remaining columns. Additional notes or special instructions should be included here.

[Tab 3 – Results]
The submission form is returned upon completion of genotyping with the requested results.

[Tab 4 – Cost Breakdown]
The cost per sample for genotyping services can be found here.

6. When and where should samples be dropped off?

Tissues can be dropped off at the Genotyping Core between 9am and 4pm, Monday-Friday. We are in the Department of Physiology on the 5th floor of the Basic Science Building (BSB). The floor is card access only, so please email the Genotyping Core to let us know that samples are ready for drop off. We will respond and arrange a time for pickup.

7. When are samples processed?

Genotyping is performed weekly, starting every Wednesday. Samples are run through our standardized DNA extraction protocol Wednesday-Friday. DNA is resuspended over the weekend, and genotyping begins the following Monday.

*Samples submitted after NOON on Thursday will be processed the following Wednesday.

8. How much do genotyping services cost?

Each sample is charged an extraction cost and a genotyping cost.
The cost for extraction and agarose genotyping is $5.34/sample.
The cost for extraction and fluorescent genotyping is $5.78/sample.

Genotyping Service	Cost per sample
DNA Extraction	$1.67
Agarose Genotyping	$3.67
Fluorescent Genotyping	$4.11
Additional DNA Prep	$29.05
Consult	$58.11

9. Will samples be run by Agarose or Fluorescent Genotyping?

Genotyping method is determined by the size of the PCR amplicon. Amplicons between 100-400bp are typically run by Fluorescent genotyping, while larger amplicons (500bp-1Kb) are run on Agarose gels. Fluorescent genotyping is performed using a capillary electrophoresis protocol on a Applied Biosystems SeqStudio 24 Flex Genetic Analyzer. Samples are run in duplicate using two different fluorescent dyes.

Current or previously used genotyping protocols are very helpful. If these are available, please send them to the Genotyping Core for review.

10. How and when are results returned?

Results are returned via email to the contact(s) listed on Tab 1 of the Genotyping Submission Form. All fluorescent data and gel images can be found in the Results Tab (Tab 3) of the Genotyping Submission Form. Results are typically returned by the following Wednesday, assuming all has gone well and there is no missing or incomplete data.

11. When are invoices sent?

Core personnel will generate a service request in iLab and enter accrued service charges. Invoices are sent at the end of each month via iLab to the Principal Investigator (PI) or their appointed financial manager. Submission forms/samples received during the last week of any month will be invoiced at the end of the following month.

12. How can invoices be paid?

Invoice payments are made through iLab. Please send invoice inquiries to Allison Endsley.