

## Genotyping at AgriPlex Genomics

The objective of this document is to guide you through the requirements for submitting a project to Agriplex Genomics. It addresses:

- General guidelines for sample submission (this document)
- Providing DNA sequences and target SNPS (SNPs Submission Form)
- Required sample submission documentation (Bulk Sample List)

**Important:** The Files You are about to Submit are Processed by Automated Software, **Do Not Change the Format of the Files, Do Not Remove Any Row** - any variations may result in delays.

### Sample Submission Guidelines:

You may send us your samples for analysis either as tissue samples, or as isolated DNA samples. If you are shipping to us isolated DNA samples, please see the following requirements:

### DNA Samples Submission:

The following minimal DNA quantity and concentration are required:

No. of SNPS	Concentration	Volume
1-45	5ng/ul	70 ul
>45	5ng/ul	1.6 ul/SNP

Please Provide:

- DNA in WATER.
- An identical volume for all samples in the plate.
- **Leave G12 and H12 EMPTY** for Agriplex Controls.

**Do not fill** your 96 well DNA plates with more than 120 ul of DNA.

**Do not fill** your 384 well DNA storage plates with more than 40 ul of DNA.

### Plastic Ware:

To ensure compatibility with our robotics platforms, and to ensure that your samples arrive safely (without leakage and cross-contamination), please submit samples in the following specified plastic-ware:

**DNA Samples** submission is required in one of the following 96 Well Full-Skirted PCR Plates:

- FrameStar 96 Well Plate, by 4titude, sold by Labsource, Cat. #: P97-405-CS
- twin.tec® microbiology PCR Plate 96, skirted, produced and sold by Eppendorf, cat. #30129300

Plates should be sealed with:

- Peel Seal by 4titude, available through Labsource, cat. # 4ti-0520, P98-560-CS.

If you are submitting tissue samples, please see the following requirements:

### **Tissue Samples Submission:**

If you are sending leaf punches (~6mm in diameter, each) please submit 2 leaf punches/well.

List of sample names; limit names to 20 characters using only alphanumeric characters and the underscore symbol.

- Submitting sample names will assist in the interpretation of the final analysis report. If you do not provide sample names, we will assign generic names e.g.: S001, S002... and this is how they will appear in your report.

### **Plasticware:**

If using **96 deep-well plates**, please use one of the following:

- Abgene™ 96 Well 1.2mL Polypropylene Deepwell Storage Plate, through Thermo; cat.# AB0564
- 1.2ml 96-Well Deep-Well Plates, Clear, Square Well, V-bottom, by ISCI through Labsource, cat.# DP12VS-9-N

Both plate types should be sealed with:

- Peel Seal by 4titude, available through Labsource, cat. # 4ti-0520, P98-560-CS.

You can also use Racked Microtubes, 1.1 mL 8-strips, Natural, made by National Scientific Supply Co, INC. and sold through VWR, cat. # TN0946-08R, 20901-023.

96 well Microtube plate should be sealed by one of the following 96 well cap mats:

- Microtube Mat, 96-Well Plug Mats, by National Scientific Supply Co, INC., sold by VWR, cat # TN3346-96C, 20901-003.
- 96-well Sealing Mats, by Abgene sold by Thermo Scientific, cat #AB0564

### **All sample plates (DNA or Tissue) should be labeled:**

#### **Plate Labels:**

- Plate names should be between 1 and 30 characters in length; Use **ONLY:** alphanumeric characters, underscore, or dash.
- The plate names on the labels should match the plate names used in the Sample Submission Form.
- Use adhesive labels that will stay on the plates at -20C and 95C.
- Labels should be printed (If printed labels are not available, please use a black sharpie and write (legibly) the plate name on the plate.)
- **Label the plates on the east side of the plate**

## Download and fill out our Sample List Form:

If submitting DNA samples, please indicate in the form:

- The concentration of the DNA provided and method of DNA quantification, as well as
  - The volume that you are providing.
- If you have crude DNA preps or limiting amounts of DNA that prohibit you from providing the above information or amounts requested in the DNA Sample Submission table, please contact us to discuss other options.

## Sample Names

- Fill in sample names for each plate sequentially **on the same form – if you submit more than 99 plates, please contact us for further instructions.**
- Sample Names are not required but are highly recommended as they will make the final report more meaningful.
- Limit names to 20 characters, using only alphanumeric characters and the underscore.

**Important: Make sure that each sample name and every plate name are unique.**

## Shipping of plates:

- Ship sample plates frozen on dry ice (we recommend wrapping the plates with bubble wrap before placing them on the dry ice). This helps ensure that there will be no leakage or cross-contamination should there be an issue with the seal and that the integrity of the DNA will not be compromised.
- To ensure plates are not compromised during shipment please place a piece of cardboard between plates, wrap with rubber bands and place them in a plastic bag.
- Ship for overnight delivery and make sure that samples will arrive during week-days (Tuesday – Friday.)
- Ship to: AgriPlex Genomics, 11000 Cedar Avenue, Suite 250, Cleveland, OH 44106, USA