

Materials needed

3-hydroxypicolinic acid (HPA)  
Ammonium Citrate dibasic  
Water  
Acetonitrile

Matrix Preparation

- Make a solution of 50g/l HPA, 5g/l ammonium citrate in 1:1 water:acetonitrile

Total volume:	500 uL
HPA:	25 mg
Ammonium citrate:	2.5 mg
Water	250 uL
Acetonitrile	250 uL

- Dissolve by rapid vortexing. No heat is necessary
- Aliquot 10 uL in separate vial

Sample Preparation

*If DNA is  $\geq 500 \mu\text{M}$*

- Place appropriate volume of solution in matrix solution (10 uL) to reach a final oligo concentration of ca. 25-50 uM (25-50 pmol/uL)

*If DNA is  $< 500 \mu\text{M}$*

- Calculate volume needed for 250-500 pmol DNA (10 uL basis), place in separate tube, speed vac to dryness. Reconstitute with 10 uL matrix solution

Plate spotting protocol

*We use a dried drop technique for sample spotting*

- Place 2 uL matrix/DNA solution on a spot
- If paranoid, create replicates of each spot
- Allow to completely dry before transporting