

## MALDI-TOF MS Submittal Form

MS Lab Manager, Dr. Qiaoli Liang  
Shelby L120A (348-2627), [liang005@bama.ua.edu](mailto:liang005@bama.ua.edu)

Name: \_\_\_\_\_ E-mail: \_\_\_\_\_ Date: \_\_\_\_\_

Research advisor: \_\_\_\_\_ Account to be charged: \_\_\_\_\_

Sample name: \_\_\_\_\_ Sample name abbreviation: \_\_\_\_\_

Sample type:  peptide,  oligonucleotide,  polymer,  aromatic compound,  other

Solvents to dissolve: \_\_\_\_\_

If sample is in solution list solvent: \_\_\_\_\_

Approximate amount or concentration of the sample: \_\_\_\_\_

Possible contaminants: \_\_\_\_\_

Sample handling (e.g. store in freezer, etc.): \_\_\_\_\_

Expected molecular weight: \_\_\_\_\_

Services requested:  MS  MS/MS

Internal calibration to improve mass accuracy\*

Proposed molecular formula and structure: \_\_\_\_\_ Attach your sample vial here: \_\_\_\_\_

### Important!!!

A \$20 service fee is charged for each MALDI-TOF sample. This includes analysis using up to 3 matrices. Please consult your adviser before submitting samples for MALDI-TOF experiment.

\* MALDI mass accuracy under optimal conditions:

Linear mode (better sensitivity): internal calibration,  $\leq 50$  ppm; external calibration,  $\leq 200$  ppm.

Reflector mode (better resolution): internal calibration,  $\leq 10$  ppm; external calibration,  $\leq 100$  ppm.

In general, internal calibration provides greater mass accuracy than external calibration. However, the standards may suppress analyte ion formation. When the analyte signal intensity is a major consideration an external calibration is recommended.