

# NMR Sample Submission Form

UTSW Department of Biochemistry Small-molecule NMR Core Facility

Date & Time Submitted: \_\_\_\_\_ Expedited:

## User Information

Name: \_\_\_\_\_ Email: \_\_\_\_\_

Phone: \_\_\_\_\_ PI/Company: \_\_\_\_\_

## Sample Information

Label: \_\_\_\_\_ Solvent: \_\_\_\_\_

Amount (mg): \_\_\_\_\_ Molecular Weight: \_\_\_\_\_

Additional Information: \_\_\_\_\_

Proposed Structure (if available):

**NMR Experiments Requested** (indicate desired parameter settings and/or experiment time if known):

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

### NMR Facility Use Only

Date & Time Completed: \_\_\_\_\_

Time Used: \_\_\_\_\_ Amount Charged: \_\_\_\_\_

# Sample Submission Instructions

## General

1. Samples should be clearly labeled and submitted with this electronically fillable form to L1.103. Prior arrangement is required for the date and time to drop off or pick up your samples.
2. Normal turnaround time will be 24 to 72 hours depending on the samples submitted, experiments requested, and how busy the instruments are. Expedited service can be requested, but not guaranteed.
3. You will be notified by email when your sample is completed and ready for pickup at L1.103. Samples should be picked up within one week of notification, and will be disposed of after one month.
4. Data will be archived into a tar file and emailed to the address provided.
5. Minimum amount of time charged per sample is 10 minutes.

## Sample

6. Use 8" long NMR tubes so that your samples can be run on any instrument that is open.
7. Deuterated solvent should be used. Indicate ratio if using mixed solvents.
8. For standard wall 5mm NMR tubes, the amount of solvent recommended is 0.6 mL.
9. For best results, samples should be clear and homogenous.
10. No radioactive samples can be submitted.
11. If the sample is hazardous or unstable and requires special care and handling, or if expedited service is requested, please describe in as much detail as possible under "Sample Information - Additional Information".
12. Sample amount, molecular weight, and proposed structure are information helpful in optimizing the NMR experiments you requested.

## Experiments

13. Available NMR experiments:
  - a. Standard 1D for various nuclei ( $^1\text{H}$ ,  $^{13}\text{C}$ ,  $^{19}\text{F}$ ,  $^{31}\text{P}$ ,  $^{11}\text{B}$ ,  $^{15}\text{N}$ , etc.) – specify nucleus, spectral window, and number of scans (nt) or length of experiment time.
  - b. 1D  $^1\text{H}$  with solvent suppression.
  - c. CRAPT (similar to but recommended over APT or DEPT).
  - d. TOCSY1D, NOESY1D, ROESY1D - specify the signal(s) to irradiate.
  - e. 2D COSY, TOCSY, NOESY, ROESY – specify nt and ni (number of increments).
  - f. HSQC, HMBC – specify nt, ni, and  $^{13}\text{C}$  spectral window.
14. If no parameters or time are specified, the operator will use his best judgement or the default parameters might be used.