

Proton Homonuclear Decoupling

1. Run a 1D proton spectrum.
2. Write this file to another experiment by typing “wrpa #”, where # = the experiment you wish to run the homonuclear decoupling in. (example: type “wrpa 2” to write the file to experiment 2)
3. Locate the center of the peak you wish to irradiate for decoupling. Write down the chemical shift in Hz for the peak.
4. Enter experiment 2 typing “re 2”.
5. Type “rpar PROHOMODEC all”. *NOTE: This command is case-sensitive.*
6. Type “solvent” and enter your solvent at the prompt.
7. Type “gpro” to load up the solvent and experiment parameters.
8. Type “o2” and enter the chemical shift in Hz that you found for the 1D proton.
9. Type “ns” and change the number of scans as needed.
10. Type “zg” to begin the acquisition.
11. When the experiment is complete, type “efp” and “apk” to view the spectrum and autophase.
12. To run the decoupling experiment on other peaks in the spectrum, go to experiment one by typing “re 1”. Repeat steps 2-11 as needed.