

NMR Predict

You may also try the **old Applet version**

Draw a chemical structure and click on "Calculate spectrum". You may also DRAG / DROP a molfile ! You will get an interactive NMR spectrum.

References

- Banfi, D.; Patiny, L. www.nmrdb.org: Resurrecting and processing NMR spectra on-line *Chimia*, **2008**, 62(4), 280-281.
- Andrés M. Castillo, Luc Patiny and Julien Wist. **Fast and Accurate Algorithm for the Simulation of NMR spectra of Large Spin Systems**. *Journal of Magnetic Resonance* **2011**.
- Aires-de-Sousa, M. Hemmer, J. Gasteiger, " **Prediction of 1H NMR Chemical Shifts Using Neural Networks**", *Analytical Chemistry*, **2002**, 74(1), 80-90.

Paste or drop a molfile or SMILES

Help

Chemical structure with hydrogen exploded ?

List of signals

Assignm...	Delta	N...	Mult	J (Hz)	...
2,3,4	3.076	3	s		

¹H NMR: δ 3.08 (3H, s).

1H NMR spectra - Double click to zoom out, SHIFT + double click to zoom out by step, SHIFT + drag to move spect

3.46 ppm

Advanced options

Frequency: 400 ▾

From: 0 ppm To: 11 ppm

Line width: 1 Hz

Number points: 32k ▾

Simulate spectrum

Draw a chemical structure and click on "Calculate spectrum".
You may also DRAG / DROP a molfile !
You will get an interactive NMR spectrum.

Labile protons like OH, NH, CO₂H are not predicted !

References

- Banfi, D.; Patiny, L. www.nmrdb.org: Resurrecting and processing NMR spectra on-line *Chimia*, **2008**, 62(4), 280-281.
- Fast and Accurate Algorithm for the Simulation of NMR spectra of Large Spin Systems. Andrés M. Castillo, Luc Patiny and Julien Wist. *Journal of Magnetic Resonance* **2011**. [10.1016/j.jmr.2010.12.008](https://doi.org/10.1016/j.jmr.2010.12.008)
- Aires-de-Sousa, M. Hemmer, J. Gasteiger, " **Prediction of 1H NMR Chemical Shifts Using Neural Networks**", *Analytical Chemistry*, **2002**, 74(1), 80-90 most of the proton descriptors are explained. In that work they were used for the prediction of 1H counterpropagation neural networks. Y. Binev, J. Aires-de-Sousa, " **Structure-Based Predictions of 1H NMR Chemical Shifts Using Forward Neural Networks**", *Journal of Magnetic Resonance*, **2003**, 176(1), 1-12.