Delta Tips

NMDT 0020

NMR data processing software

v5.0



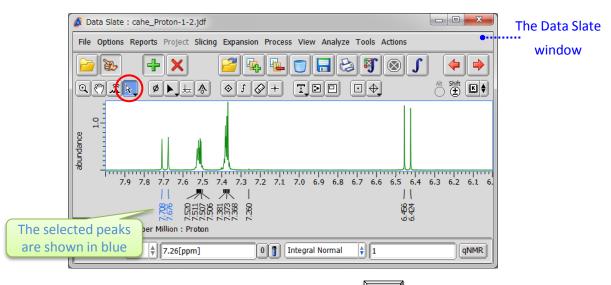
JEOL RESONANCE

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How to Measure Coupling Constant

¹H-¹H coupling constant (also called *J*-coupling) can be measured as the horizontal distance between two peaks in proton spectra. First of all, perform peak picking in Processor or Data Slate. We show a Data Slate window in the figures below.

① Click the 📘 button and select two peaks to measure *J*-coupling between them.



★ It is possible to select peaks one by one while holding the Shift key.

② Hit the J key to display the J-coupling value between the peaks in Hz unit.

Note that *J*-coupling value is displayed above the peaks. The lines indicate the peaks and the value.

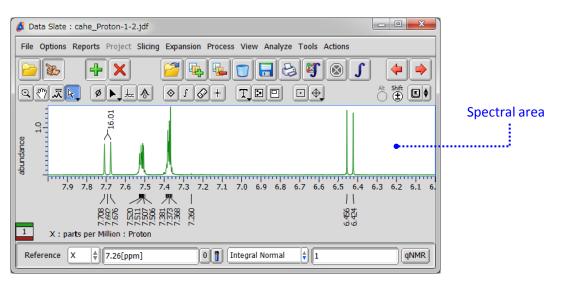
🖉 Data Slate : cahe_Proton-1-2.jdf	x
File Options Reports Project Slicing Expansion Process View Analyze Tools Actions	
> + × 2 4 5 5 4	-
	K♦
9.01	
J-coupling	
(Hz)	
7.9 7.8 7.7 7.6 7.5 7.4 7.3 7.2 7.1 7.0 6.9 6.8 6.7 6.6 6.5 6.4 6.3 6.2 6	
/\ /▶ /┞ / / //	
X : parts per Million : Proton	
Reference X 26[ppm] 0 1 Integral Normal 1 qN	IMR
J-marker	



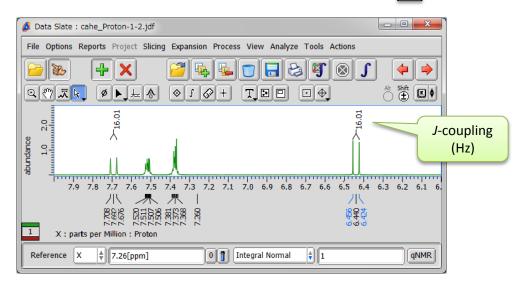


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③ If you wish to measure *J*-coupling between another two peaks, hit the \boxed{U} key to unselect the previous pair. Alternatively, you can clink inside the spectral area to unselect the peaks.



④ Select another two peaks and display the *J*-coupling value by hitting the **J** key.



★ To remove the J-coupling value, select the J-marker and hit the Delete key as shown below.

