

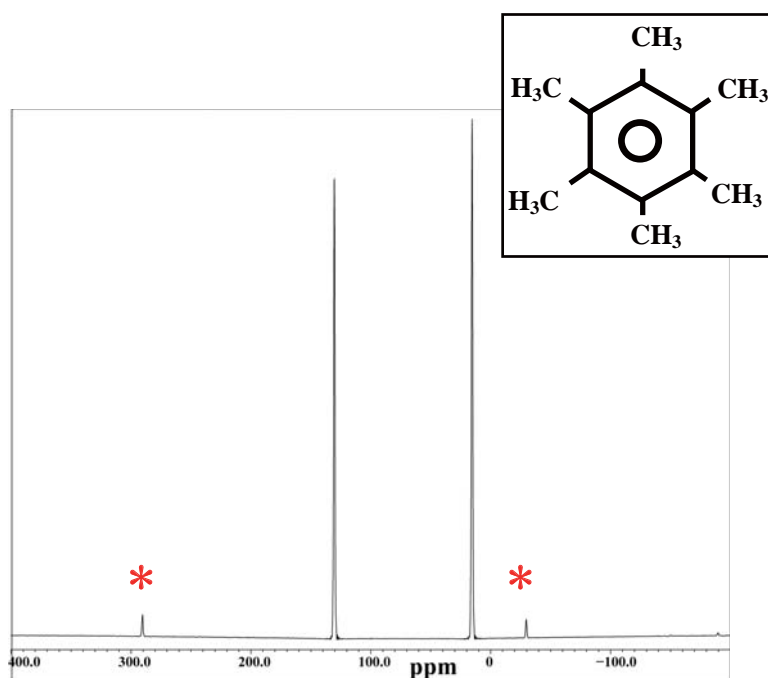
Fast-spinning 3.2mm CPMAS probe

JEOL Resonance supplies "Fast-spinning 3.2mm CPMAS probe" which gives spinning sideband free spectra in high-field solid-state NMR spectroscopy.

Use of a 3.2mm rotor realizes a fast spinning speed of 24 kHz with preventing excessive reduction in sensitivity, in comparison with a conventional 4mm rotor.



ECA solid-state rotors
(From left to right)
6mm SRMAS rotor
6mm zirconia rotor
6mm Si₃N₄ rotor
4mm zirconia rotor
4mm Si₃N₄ rotor
3.2mm zirconia rotor
3.2mm Si₃N₄ rotor



CPMAS spectrum of hexamethylbenzene observed with JNM-ECA600 at the spinning frequency of 24.2 kHz. *'s indicate spinning sidebands arising from aromatic carbons. Fast spinning of 24 kHz may give spinning sideband free spectra even in 600 MHz high-field systems.

Comparison of JNM-ECA CPMAS probes

	6mm	4mm	3.2mm
Max. spinning speed	12 kHz	19 kHz	24 kHz
Sample volume ¹⁾	166 μ l	37 μ l	27 μ l
Sensitivity ²⁾	180	140	120

1) With standard spacers.

2) For hexamethylbenzene with 8 scans in 400 MHz systems.