

5. Probe tuning table

Always operate the probe with the following external filters.

1. ¹H channel: 1H pass 1200.13 MHz. Part number: W1348174
2. X channel: 0-31P / 0-485.7 MHz pass. Part number: W134925

Table 3: Probe Tuning Table

X nucleus	Type-A insert	Type-A insert	Type-B insert	Type-B insert
	Left	Right	Left	Right
¹¹ B	7R5	302-7R5	0-3R6	-
¹²⁵ Te	7R5	283-7R5	0-3R6	-
¹⁴¹ Pr	7R5	242-7R5	0-3R6	-
⁷¹ Ga	7R5	238-7R5	0-3R6	-
⁶⁵ Cu	7R5	8R2	0-4R3	-
¹²⁹ Xe	7R5	8R2	0-6R2	-
⁸¹ Br	7R5	8R2	0-7R5	-
⁶³ Cu	7R5	150	0-6R2	-
²³ Na	7R5	150	0-6R2	-
⁵¹ V	7R5	150	0-7R5	-
¹²³ Te	7R5	150	0-7R5	-
²⁷ Al	7R5	150	0-7R5	-
¹³ C	100	200	0-7R5	-
⁷⁹ Br	100	200	0-7R5	-
¹⁶¹ Eu	100	200	0-7R5	-
⁵⁵ Mn	100	200	0-7R5	-
⁹³ Nb	100	200	0-100	-
²⁰⁹ Po	100	200	0-100	-
⁴⁵ Sc	100	200	0-100	-
¹⁵⁹ Tb	150	9R1	0-200	-
²³¹ Pa	150	9R1	0-200	-
⁶⁹ Ga	150	9R1	0-200	-
¹²¹ Sb	150	9R1	0-200	-
⁵⁹ Co	150	9R1	0-200	-
¹⁸⁷ Re	150	9R1	0-SC	-
¹⁸⁵ Re	150	9R1	0-SC	-
¹¹³ Cd	150	9R1	0-SC	-
⁹⁹ Tc	150	9R1	0-SC	-
¹¹⁵ In	150	9R1	0-SC	-
¹¹³ In	150	9R1	0-SC	-
¹⁹⁵ Pt	150	9R1	0-SC	-
¹¹¹ Cd	150	9R1	0-SC	-
¹⁶⁵ Ho	150	9R1	0-SC	-
²⁰⁷ Pb	150	9R1	0-SC	-
¹²⁷ I	SC	SC	0-7R5	-
²⁹ Si	SC	SC	0-7R5	-
⁷⁷ Se	SC	SC	0-200	-
¹⁹⁹ Hg	SC	SC	0-200	-
¹⁷¹ Yb	SC	SC	0-SC	-
⁷⁵ As	SC	SC	0-SC	-

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Table 3: Probe Tuning Table (Continued)

X nucleus	Type-A insert	Type-A insert	Type-B insert	Type-B insert
	Left	Right	Left	Right
²⁰⁹ Bi	SC	SC	0-SC	0-1R0
² H	SC	SC	0-SC	0-1R0
⁶ Li	SC	SC	0-SC	0-4R3
¹³⁹ La	SC	SC	0-SC	0-4R3
⁹ Be	SC	SC	0-SC	0-4R3
¹⁷ O	SC	SC	0-SC	0-4R3
¹³⁸ La	SC	SC	0-SC	0-5R6
¹³³ Cs	SC	SC	0-SC	0-5R6
¹²³ Sb	SC	SC	0-SC	0-5R6
¹⁸¹ Ta	SC	SC	0-SC	0-100
¹⁷⁵ Lu	SC	SC	0-SC	0-100
¹³⁷ Ba	SC	SC	0-SC	0-200
¹⁵³ Eu	SC	SC	0-SC	0-200
¹⁰ B	SC	SC	0-SC	0-200
¹⁵ N	SC	SC	0-SC	0-200

- = No Insert
 SC = Short Circuit



Figure 13

In some situations, impedance mismatch between filters and cables can lead to a spurious resonance appearing close to the ¹H resonance. This issue can be resolved by extending the length of the cable connecting the X channel of the probe to the preamplifier, using the connectors that are provided with the probe.



Figure 14



If you observe tuning or matching issues, make sure that the inserts are clean. Only use isopropanol to clean the surface of the inserts.