

## Appendix

### Recommended Values for Tuning Parameters

#### x-Lens Configuration

**Table 1** Recommended Values (When Using a MicroMist Nebulizer)

Parameter	No Gas Mode		Cell Gas Mode		(High Energy) Collision Mode <sup>*1</sup>	
	Value	Range	Value	Range	Value	Range
RF Power [W]	1550	Fixed	1550	Fixed	1550	Fixed
Smpl Depth [mm]	8.0	Fixed	8.0	Fixed	8.0	Fixed
Carrier Gas [L/min]	1.05	1.01 to 1.11	1.05	1.01 to 1.11	1.05	1.01 to 1.11
Makeup Gas [L/min]	0	0 to 0.50	0	0 to 0.50	0	0 to 0.50
Dilution Gas [L/min]	0	Fixed	0	Fixed	0	Fixed
Neb Pump [rps]	0.1	Fixed	0.1	Fixed	0.1	Fixed
S/C Temp [degC]	2	Fixed	2	Fixed	2	Fixed
He or H <sub>2</sub> gas [ml/min]	0	Fixed	4.3 (He) 6.0 (H <sub>2</sub> )	4.0 to 5.5 (He) 5.0 to 7.0 (H <sub>2</sub> )	10 (He)	8 to 11 (He)
Extract 1 [V]	0	Fixed	0	Fixed	0	Fixed
Extract 2 [V]	-180	-250 to -160	-180	-250 to -160	-180	-250 to -160
Omega Bias [V]	-80	-110 to -70	-80	-110 to -70	-80	-110 to -70
Omega Lens [V]	10	7 to 12	10	7 to 12	10	7 to 12
Cell Entrance [V]	-30	-40 to -30	-40	-40 to -30	-130	-150 to -110
Cell Exit [V]	-50	-60 to -40	-60	-60 to -40	-150	Fixed
Deflect [V]	10	8 to 15	0	-5 to 4	-80	-90 to -70
Plate Bias [V]	-35	-50 to -30	-60	Fixed	-150	Fixed
OctP RF [V]	180	150 to 200	180	150 to 200	190	180 to 200
OctP Bias [V]	-8	-10 to -6	-18	Fixed	-100	Fixed
Energy Discrimination	5	2 to 6	5	3 to 6	7	6 to 9

<sup>\*1</sup> These settings reduce interferences in Helium mode. However, since they also reduce low-mass sensitivity, use these settings if they are appropriate for your particular analysis.