

**Supplemental Table S2.** AB Sciex 5500 QTrap Mass Spectrometer Settings for Complex Sphingolipids

	N-Acyl	Q1 <i>m/z</i>	Q3 <i>m/z</i>	DP (V)	CE(V)	CXP (V)
Ceramides	C12:0	482.6	264.4	60	35	10
	C14:0	510.7	264.4	60	36	10
	C16:0	538.7	264.4	60	37.5	10
	C18:1	564.7	264.4	60	39	10
	C18:0	566.7	264.4	60	39	10
	C20:0	594.7	264.4	60	40	10
	C22:0	622.8	264.4	60	41.5	10
	C24:1	648.9	264.4	60	42.5	10
	C24:0	650.9	264.4	60	42.5	10
	C26:1	676.9	264.4	60	45	10
	C26:0	678.9	264.4	60	45	10
Monohexosyl- ceramides	C12:0	644.6	264.4	80	40	10
	C14:0	672.6	264.4	80	41.5	10
	C16:0	700.7	264.4	80	42.5	10
	C18:1	726.7	264.4	80	43.5	10
	C18:0	728.7	264.4	80	43.5	10
	C20:0	756.7	264.4	80	45	10
	C22:0	784.8	264.4	80	47	11

	C24:1	810.9	264.4	80	47.5	11
	C24:0	812.9	264.4	80	47.5	11
	C26:1	838.9	264.4	80	48	11
	C26:0	840.9	264.4	80	48	11
Sphingomyelins	C12:0	647.7	184.4	70	40	12
	C14:0	675.7	184.4	70	41	12
	C16:0	703.8	184.4	70	42.5	12
	C18:1	729.8	184.4	70	44	12
	C18:0	731.8	184.4	70	45	12
	C20:0	759.9	184.4	70	47	12
	C22:0	787.9	184.4	70	47.5	12
	C24:1	813.9	184.4	70	47.5	13
	C24:0	815.9	184.4	70	47.5	13
	C26:1	841.9	184.4	70	50	13
	C26:0	843.9	184.4	70	50	13

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DP (V), Declustering Potential (Volts); CE (V), Collision energy (Volts); CXP (V), Collision Cell Exit Potential (Volts).