

Table EV6: MRM transitions used in this study.

Nucleoside	Precursor ion (m/z)	Fragment ion (m/z)	Collision energy	Cell accelerator voltage
dC* (natural isotopologue +1)**	229	113	5	8
5mdC	241.9	126	6	8
5hmdC	257.9	142	8	7
5fdC	256.1	140	6	8
5cadC	272	156	6	8
¹⁵ N ₃ -dC	231	115	5	8
² H ₃ -5mdC	244.9	129	6	8
¹⁵ N ₃ -5hmdC	260.9	145	8	7
¹⁵ N ₃ -5fdC	259.1	143	6	8
¹⁵ N ₃ -5cadC	275	159	6	8

*MS1 and MS2 resolutions were set to unit for all ions except dC and dG where MS1 resolution was set to enhanced.

**detection of natural isotopomers increases the dynamic range of the method as was described previously (Tsuji et al. 2014).