

**Supporting Information**

**for**

**“Determination of DNA Adenine Methylation in Genomes  
of Mammals and Plants by Liquid Chromatography /  
Mass Spectrometry”**

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Table S1. The MRM transitions and optimal parameters for the analysis of nucleosides by mass spectrometry.

Nuclosides	Precursor ion	Product ion	DP/V	EP / V	CEP / V	CE / V	CXP / V
m <sup>6</sup> dA	266.1	150.2	21.8	7.0	16.6	19.0	2.5
dA	252.4	136.2	15.0	5.0	15.0	23.0	2.0
dC	228.4	112.2	11.0	5.0	15.0	23.0	3.0
dG	268.4	152.4	15.0	5.0	20.0	23.0	5.0
dT	243.3	127.2	25.0	5.0	15.0	23.0	5.0
m <sup>6</sup> A	282.2	150.1	32.0	8.0	10.0	27.0	2.6
rA	268.4	152.4	15.0	5.0	16.6	23.0	2.0
rC	244.1	112.1	20.0	8.0	10.0	21.3	2.4
rG	284.5	152.2	40.0	5.0	9.0	23.0	6.0
rU	245.4	113.1	24.7	6.0	13.0	13.7	3.8

Table S2. m<sup>6</sup>dA and m<sup>6</sup>A contents in 15 T2DM patients and 15 control subjects.

Sample Name	m <sup>6</sup> A/A,%	m <sup>6</sup> dA/dA,%
T2DM-1	0.11	0.00030
T2DM-2	0.09	0.00031
T2DM-3	0.10	0.00029
T2DM-4	0.10	0.00031
T2DM-5	0.10	0.00023
T2DM-6	0.10	0.00027
T2DM-7	0.12	0.00033
T2DM-8	0.13	0.00027
T2DM-9	0.12	0.00034
T2DM-10	0.13	0.00025
T2DM-11	0.13	0.00025
T2DM-12	0.14	0.00028
T2DM-13	0.12	0.00023
T2DM-14	0.11	0.00027
T2DM-15	0.12	0.00028
Control-1	0.12	0.00034
Control-2	0.18	0.00033
Control-3	0.17	0.00030
Control-4	0.16	0.00030
Control-5	0.16	0.00032
Control-6	0.16	0.00034
Control-7	0.17	0.00031
Control-8	0.17	0.00038
Control-9	0.19	0.00048
Control-10	0.20	0.00039
Control-11	0.16	0.00022
Control-12	0.21	0.00037
Control-13	0.23	0.00033
Control-14	0.26	0.00028
Control-15	0.19	0.00033

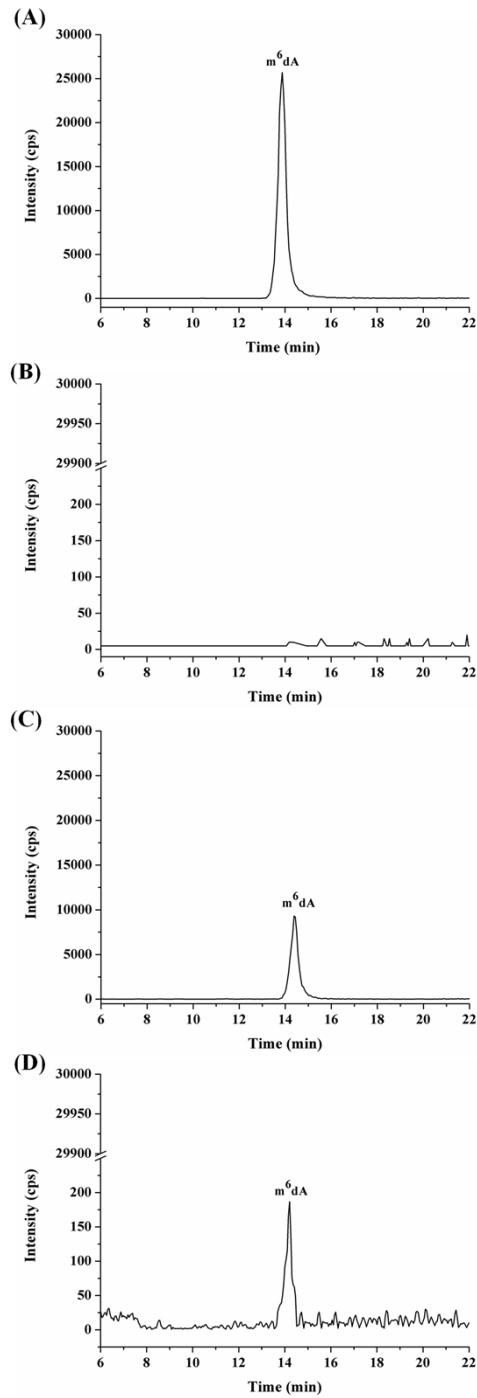


Figure S1. Elimination of possible bacterial DNA by Dpn I cleavage coupled with size-exclusion ultrafiltration. MRM chromatograms of  $m^6dA$  from (A) 100 ng bacterial DNA, (B) the retentate of 100 ng bacterial DNA treated by Dpn I cleavage coupled with size-exclusion ultrafiltration, (C) 5  $\mu$ g 293T DNA, (D) the retentate of 5  $\mu$ g 293T DNA treated by Dpn I cleavage coupled with size-exclusion ultrafiltration.

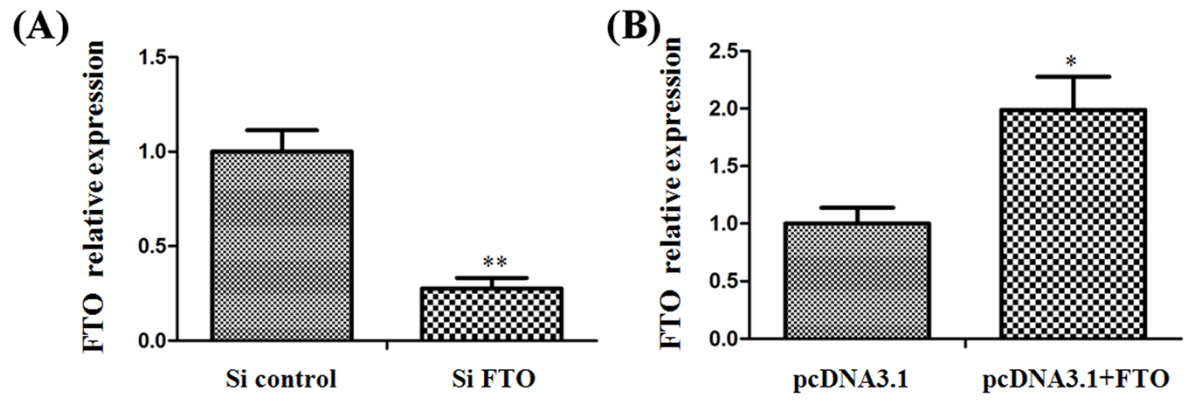


Figure S2. Expression levels of *FTO* gene in cells upon knockdown and overexpression.\*  $p < 0.05$ , \*\* $p < 0.01$ .