Supplementary materials

Sample DNA Concentrations on Experimental Plate

The DNA concentration for each sample in the plate was as below:

Input DNA: The amount of DNA for each assay can be 100 ng to 300 ng. For optimal quantification, the input DNA amount should be 300 ng, as basal 8-OHdG is generally less than 0.01% of total DNA.

Table S1. The DNA concentration for each sample in the plate (8 ul was used for each well).

	1	2	3	4	5	6	7	8	9	10	11	12
A	NC	264	432	120	168	424	592	328	512	328	250	100
B	PC	264	224	144	240	552	29.5	632	200	792	250	100
C	PC 5	240	128	232	1024	400	352	536	176	344	250	100
D	PC10	87	352	84	120	1232	768	432	852	250	250	100
E	PC20	104	656	456	896	1032	440	224	896	250	250	100
F	PC50	160	88	352	480	856	632	384	688	250	250	100
G	PC100	144	376	304	664	656	560	392	204	250	100	100
H	PC200	128	712	472	472	1136	632	384	440	250	100	100

Table S2. The OD for each well using wave length about 450 nm.

col.	1	2	3	4	5	6	7	8	9	10	11	12
A	0.126	0.131	0.157	0.196	0.095	0.205	0.196	0.117	0.131	0.136	0.165	0.112
B	0.927	0.086	0.130	0.097	0.111	0.125	0.104	0.121	0.068	0.111	0.115	0.224
C	0.071	0.092	0.102	0.089	0.091	0.084	0.126	0.055	0.111	0.079	0.102	0.217
D	0.292	0.101	0.108	0.071	0.087	0.061	0.072	0.062	0.065	0.261	0.069	0.111
E	0.424	0.109	0.200	0.097	0.262	0.355	0.100	0.074	0.132	0.077	0.098	0.131
F	0.774	0.090	0.141	0.074	0.090	0.064	0.082	0.060	0.150	0.137	0.082	0.242
G	0.957	0.749	0.373	0.413	0.171	0.217	0.133	0.118	0.083	0.105	1.554	1.409
H	1.669	0.199	0.315	0.237	0.186	0.268	0.124	0.102	0.148	0.158	0.122	0.256

Quantification and Calculation of 8-OHdG Levels

A. Absolute Quantification results:

Table S3. The Absolute Quantification ratio of 8-OHdG for each sample.

	2	3	4	5	6	7	8	9	10	11	12
A	0.0003%	0.0010%	0.0078%	0.0000%	0.0025%	0.0015%	0.0000%	0.0002%	0.0003%	0.0016%	**0.0000%**
B	0.0000%	0.0002%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	**0.0131%**
C	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	**0.0122%**
D	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0072%	0.0000%	**0.0000%**
E	0.0000%	0.0015%	0.0000%	0.0020%	0.0034%	0.0000%	0.0000%	0.00009%	0.0000%	0.0000%	**0.0007%**
F	0.0000%	0.0023%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0005%	0.0006%	0.0000%	**0.0155%**
G	0.0579%	0.0088%	0.0126%	0.0020%	0.0018%	0.0001%	0.0000%	0.0000%	0.0000%	1910.%3	**0.1720%**
H	0.0076%	0.0035%	0.0031%	0.0017%	0.0016%	0.0000%	0.0000%	0.00067%	0.0017%	0.0000%	**0.0174%**

B.Relative Quantification results

Table S4. The Relative Quantification of 8-OHdG for each sample.

Row	Col 2	Col 3	Col 4	Col 5	Col 6	Col 7	Col 8	Col 9	Col 10	Col 11	Col 12
A	0.00024%	0.00090%	0.00728%	0.00000%	0.00233%	0.00148%	0.00000%	0.00012%	0.00038%	0.00195%	0.00000%
B	0.00000%	0.00022%	0.00000%	0.00000%	0.00000%	0.00000%	0.00000%	0.00000%	0.00000%	0.00000%	0.0122%

C	0.00000%	0.00000%	0.00000%	0.00000%	0.00000%	0.00000%	0.00000%	0.00000%	0.00000%	0.00000%	0.0114%
D	0.00000%	0.00000%	0.00000%	0.00000%	0.00000%	0.00000%	0.00000%	0.00000%	0.00674%	0.00000%	0.00000%
E	0.00000%	0.00141%	0.00000%	0.00189%	0.00277%	0.00000%	0.00000%	0.00008%	0.00000%	0.00000%	0.0006%
F	0.00000%	0.00213%	0.00000%	0.00000%	0.00000%	0.00000%	0.00000%	0.00044%	0.00055%	0.00000%	0.0145%
G	**0.05401%**	**0.00820%**	**0.01179%**	**0.00085%**	**0.00173%**	**0.00016%**	0.00000%	0.00000%	0.00000%	**0.17782%**	0.1602%
H	**0.00712%**	**0.00331%**	**0.00294%**	**0.00159%**	**0.00156%**	0.00000%	0.00000%	0.00062%	0.00160%	0.00000%	**0.0162%**