

## Supporting information

### A carbon ion beam irradiated MWCNT/AuNPs composite sensor for sensitive assay of purine-nucleosides of DNA

Pankaj Gupta, Rosy, Rajendra N Goyal\*

**SI# Table 1:** Recovery data for dGuo and dAdo determination in herring sperm DNA using carbon beam irradiated MWCNT/AuNPs/GC.

Sample No.	Spiked ( $\mu\text{M}$ )	Observed <sup>a</sup> ( $\mu\text{M}$ )	Actual <sup>b</sup> ( $\mu\text{M}$ )	Recovery (%)
dGuo				
1	0	29.94	29.94	-
2	30	58.87	28.37	98.19
3	50	80.31	30.31	100.46
4	80	111.16	31.16	101.10
5	100	130.95	30.95	100.74
dAdo				
1	0	20.67	21.47	-
2	40	60.92	20.92	100.41
3	80	99.91	19.91	99.25
4	120	141.16	21.16	100.34
5	160	181.17	21.17	100.27

The R.S.D. value for the determination was less than 1.17% for n=3

a The observed values are sum of present + spiked amount.

b The actual amount is observed – spiked amount.

**SI# Table 2:** Recovery data for dGuo and dAdo determination in DNA extracted from the MCF7 cell line (human breast cancer cells) using carbon beam irradiated MWCNT/AuNPs/GC.

Sample No.	Spiked ( $\mu\text{M}$ )	Observed <sup>a</sup> ( $\mu\text{M}$ )	Actual <sup>b</sup> ( $\mu\text{M}$ )	Recovery (%)
dGuo				
1	0	28.13	28.13	-
2	50	78.95	28.95	101.04
3	100	126.98	26.87	99.11
4	150	177.06	27.06	99.40
dAdo				
1	0	9.15	9.15	-
2	30	39.57	9.57	101.07
3	70	78.19	8.19	98.78
4	120	127.83	7.83	98.98

The R.S.D. value for the determination was less than 1.34% for n=3

a The observed values are sum of present + spiked amount.

b The actual amount is observed – spiked amount.