S1 Table. Electrochemical parameters of DXH, EPiDXH and DNR in the absence and presence of different concentrations of DNA at pH 7.4 and 4.7{buffer: 0.12M Mcllvainesolution,Temp: 309.5K, Scan rate:0.1V/s.

	pH 7.4							pH 4.7					
DXH−DNA													
[DNA] /μM	E_p^c/ V	E_p^a/ V	i_p^c/μA	i_p^a/μA	E_p^c- $E_{p/2}$/ V	$E^c_{1/2}$/ V	[DNA] /μM	E_p^c/ V	E_p^a/ V	i_p^c/μA	i_p^a/μA	E_p^c- $E_{p/2}$/ V	$E^c_{1/2}$/ V
0	-0.56	-0.52	5.82	4.99	0.060	-0.54	0	-0.50	-0.45	8.03	7.29	0.060	-0.49
2.0	-0.54	-0.50	5.12	4.63	0.060	-0.52	2.0	-0.49	-0.41	7.19	6.90	0.060	-0.47
2.5	-0.52	-0.48	3.42	3.82	0.059	-0.50	2.5	-0.47	-0.38	6.81	5.75	0.058	-0.42
3.0	-0.50	-0.46	4.34	2.92	0.060	-0.48	3.0	-0.42	-0.36	6.02	4.89	0.045	-0.39
3.5	-0.48	-0.44	4.25	2.89	0.060	-0.46	3.5	-0.39	-0.36	5.63	4.45	0.049	-0.36
4.0	-0.46	-0.42	3.23	1.80	0.060	-0.44	4.0	-0.35	-0.34	5.15	3.99	0.051	-0.31
4.5	-0.45	-0.42	2.52	0.72	0.060	-0.43	4.5	-0.32	-0.31	5.15	3.99	0.051	-0.30
EpiDXH−DNA													
0	-0.62	-0.45	4.31	4.26	0.090	-0.54	0	-0.60	-0.47	4.58	4.11	0.053	-0.54
2.0	-0.57	-0.45	3.69	3.75	0.074	-0.51	2.0	-0.57	-0.45	3.91	3.24	0.059	-0.42
2.5	-0.43	-0.37	2.99	2.95	0.068	-0.40	2.5	-0.54	-0.45	2.99	2.95	0.050	-0.50
3.0	-0.43	-0.40	2.92	2.82	0.067	-0.41	3.0	-0.52	-0.43	1.82	1.95	0.050	-0.49
3.5	-0.43	-0.43	0.97	0.94	0.068	-0.43	3.5	-0.49	-0.43	1.53	1.33	0.050	-0.45
DNR−DNA													
0	0.70	0.40	2.02	2.40	0.094	0.55	0	0.38	0.15	1.27	1.11	0.074	0.27
2.0	0.73	0.49	2.33	2.89	0.071	0.61	2.0	0.47	0.31	1.82	-2.00	0.103	0.36
2.5	0.75	0.51	2.26	2.76	0.078	0.63	2.5	0.47	p.d	1.74	p.d	0.110	0.36
3.0	0.75	0.50	2.09	1.97	0.078	0.63	p.d	p.d	p.d	p.d	p.d	p.d	p.d
3.5	0.76	0.50	1.47	1.33	0.064	0.63	p.d	p.d	p.d	p.d	p.d	p.d	p.d

p.d – Peak disappeared