

## Quality control of Highly Sensitive 8-OHdG Check ELISA (code: KOG-HS10/E)

### 1) Comparison of standard curves of different production lot.

Lot #	8-OHdG standards (absorbance at 450nm)					
	0.125ng/mL	0.25 ng/mL	0.5 ng/mL	1 ng/mL	4 ng/mL	10 ng/mL
Lot. 030	1.316	1.224	1.070	0.842	0.379	0.217
Lot. 031	1.353	1.258	1.132	0.893	0.395	0.211
Lot. 032	1.460	1.358	1.196	0.948	0.429	0.227

### 2) Preparation of QC samples.

Prepare three normal human urine samples. Add 8-OHdG standard to prepare QC sample with high concentration of 8-OHdG. Please repeat freeze-thaw cycle at least three times and remove insoluble materials by centrifugation. Store the aliquots below -80 degree C. Before use, QC samples should be thawed out by incubation at 37 degree C for 1 hour or 4 degree C for over night.

### 3) Result of QC samples.

Lot #	QC samples (ng/mL)					
	HS-1	HS-2	HS-3	HU-1	HU-2	HU-3
Lot. 030	3.77	1.23	0.42	4.09	1.40	0.39
Lot. 031	4.29	1.42	0.42	3.97	1.47	0.43
Lot. 032	3.92	1.24	0.37	4.10	1.46	0.41

### 4) Intra-assay variation of purified 8-OHdG (N=6).

	Highly Sensitive 8-OHdG Check, lot.032 (absorbance at 450nm)					
	0.125ng/mL	0.25 ng/mL	0.5 ng/mL	1 ng/mL	4 ng/mL	10 ng/mL
1	1.462	1.374	1.204	0.949	0.441	0.229
2	1.452	1.359	1.188	0.923	0.420	0.224
3	1.458	1.342	1.217	0.966	0.429	0.224
4	1.477	1.355	1.189	0.951	0.428	0.220
5	1.461	1.359	1.198	0.939	0.430	0.234
6	1.448	1.359	1.182	0.957	0.424	0.232
Mean	1.460	1.358	1.196	0.948	0.429	0.227
S.D.	0.01	0.01	0.01	0.01	0.01	0.01
C.V.	0.7%	0.8%	1.1%	1.6%	1.7%	2.4%

**5) Intra-assay variation of QC samples (N=6).**

	Highly Sensitive 8-OHdG Check, lot.032 (absorbance at 450nm)					
	HS-1	HS-2	HS-3	HU-1	HU-2	HU-3
1	0.438	0.840	1.260	0.423	0.800	1.275
2	0.416	0.857	1.256	0.425	0.789	1.272
3	0.431	0.854	1.272	0.412	0.786	1.241
4	0.436	0.877	1.288	0.411	0.792	1.247
5	0.438	0.856	1.292	0.422	0.807	1.240
6	0.438	0.891	1.297	0.424	0.796	1.253
Mean	0.433	0.863	1.278	0.420	0.795	1.255
S.D.	0.01	0.02	0.02	0.01	0.01	0.02
C.V.	2.0%	2.1%	1.4%	1.5%	1.0%	1.2%

**6) Inter-assay variation of QC samples (N=6).**

	QC samples (ng/mL)					
	HS-1	HS-2	HS-3	HU-1	HU-2	HU-3
Lot.027	3.90	1.21	0.38	4.03	1.39	0.36
Lot.028	3.92	1.18	0.37	4.15	1.41	0.38
Lot.029	3.96	1.27	0.43	3.96	1.47	0.43
Lot. 030	3.77	1.23	0.42	4.09	1.40	0.39
Lot. 031	4.29	1.42	0.42	3.97	1.47	0.43
Lot. 032	3.92	1.24	0.37	4.10	1.46	0.41
Mean	3.96	1.26	0.40	4.05	1.43	0.40
S.D.	0.17	0.08	0.03	0.08	0.04	0.03
C.V.	4.4%	6.7%	7.0%	1.9%	2.6%	7.1%

Samples were assayed in N=6 for each days.