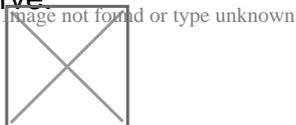


Rat 8-OHdG(8-Hydroxydeoxyguanosine) ELISA Kit

Description

Product name:	Rat 8-OHdG(8-Hydroxydeoxyguanosine) ELISA Kit
Reactivity:	Rat
Alternative Names:	8OHdG; 7,8-Dihydro-8-Oxo-2-Deoxyguanosine; 7,8-Dihydro-8-Oxodeoxyguanosine; 8-Hydroxy-2-Deoxyguanosine; 8-Oxo-DG; 7,8-dihydrodeoxyguanosine
Assay Type:	Competitive Inhibition
Sensitivity:	26.29 pg/mL
Standard:	6000 pg/mL
Range:	93.75-6000 pg/mL
Sample Type:	serum, plasma and other biological fluids
Assay Length:	2h
Research Area:	Metabolic pathway;Tumor immunity;Infection immunity;Endocrinology;Hematology;Hepatology;
Test principle:	This assay employs the competitive inhibition enzyme immunoassay technique. The microtiter plate provided in this kit has been pre-coated with 8-Hydroxydeoxyguanosine(8-OHdG) protein. Standards or samples are added to the appropriate microtiter plate wells then with a biotin-conjugated antibody specific to 8-Hydroxydeoxyguanosine(8-OHdG). Next,Avidin conjugated to Horseradish Peroxidase (HRP) is added to each microplate well and incubated. After TMB substrate solution is added. The enzyme-substrate reaction is terminated by the addition of sulphuric acid solution and the color change is measured spectrophotometrically at a wavelength of 450nm \pm 10nm. The concentration of 8-Hydroxydeoxyguanosine(8-OHdG) in the samples is then determined by comparing the OD of the samples to the standard curve.



	CONCENTRATION (NG/ML)	OD	
Standard Curve	6000.00	0.189	â€”
	3000.00	0.332	â€”
	1500.00	0.621	â€”
	750.00	0.897	â€”
	375.00	1.253	â€”
	187.50	1.583	â€”
	93.75	1.761	â€”
	0.00	2.211	â€”

Precision

Intra-assay Precision (Precision within an assay) \leq CV% < 8%

Three samples of known concentration were tested twenty times on one plate to assess intra-assay precision.

Inter-assay Precision (Precision between assays) \leq CV% < 10%

Three samples of known concentration were tested in forty separate assays to assess inter-assay precision.

Recovery

Matrices listed below were spiked with certain level of recombinant 8-OHdG and the recovery rates were calculated by comparing the measured value to the expected amount of 8-OHdG in samples.

MATRIX	RECOVERY RANGE	AVERAGE
serum(n=5)	78-92%	85%
EDTA plasma(n=5)	87-99%	93%
Heparin plasma(n=5)	80-95%	97%

Linearity

The linearity of the kit was assayed by testing samples spiked with appropriate concentration of 8-OHdG and their serial dilutions. The results were demonstrated by the percentage of calculated concentration to the expected.

MATRIX	1:2	1:4	1:8	1:16
serum(n=5)	81-94%	96-105%	88-106%	93-102%
EDTA plasma(n=5)	95-104%	97-106%	85-98%	81-92%
Heparin plasma(n=5)	95-106%	87-105%	92-101%	79-90%

Note For Research Use Only

Date Created

2024/07/03