

DNA Damage (8-OHdG) ELISA Kit | 8-OHdG elisa kit

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CATALOG #
AAA17809

REACTIVITY
Species Independent

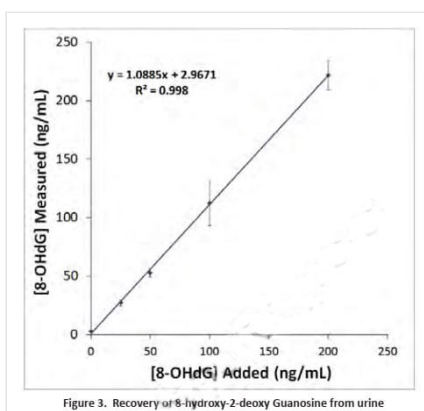
PRODUCT SYNONYMS

DNA Damage (8-OHdG); DNA Damage (8-OHdG) ELISA Kit; Colorimetric detection of 8-hydroxy-2-deoxy Guanosine ; 8-OH-dG ELISA Kit; 8OHG ELISA Kit; 8OG ELISA Kit; 8 hydroxyguanine ELISA Kit; 8-OHdG ELISA Kit; DNA Damage ELISA Kit; 8-OHdG elisa kit

PRODUCT SPECIFICATIONS

Reactivity	Species Independent
Detection Range	0.94-60 ng/mL
Sensitivity	0.59 ng/mL
Intra-assay Precision	To determine Intra-Assay Precision, three samples of known concentration were assayed thirty times on one plate. The intra-assay coefficient of variation of the DNA Damage ELISA has been determined to be <10 %.
Inter-assay Precision	To determine Inter-Assay Precision, three samples of known concentration were assayed thirty times in three individual assays. The inter-assay coefficient of variation of the DNA Damage ELISA has been determined to be <10 %.
Preparation and Storage	Store at 4 degree C and -20 degree C.

IMAGES



Standard Curve (Sample)

ADDITIONAL INFORMATION

Related Product Information for 8-OHdG elisa kit	Background: 8-hydroxy-2-deoxy Guanosine (8-OHdG) is produced by the oxidative damage of DNA (see Figure 1, on page 7) by reactive oxygen and nitrogen species and serves as an established marker of oxidative stress.1-4 Hydroxylation of guanosine occurs in response to both normal metabolic processes and a variety of environmental factors (i.e., anything that increases reactive oxygen and nitrogen species). Increased levels of 8-OHdG are associated with the aging process as well as with a number of pathological conditions including cancer, diabetes, and hypertension.5-9 In complex samples such as plasma, cell lysates, and tissues, 8-OHdG can exist as either the free nucleoside or incorporated in DNA. Once the blood enters the kidney, free 8-OHdG is readily filtered into the urine, while larger DNA fragments remain in the bloodstream. Because of the complexity of plasma samples, urine is a more suitable matrix for the measurement of free 8-OHdG than plasma. Urinary levels of 8-OHdG range between 2.7-13 ng/mg creatine, while plasma levels of free 8-OHdG have been reported to be between 4-21 pg/ml as determined by LC-MS.10-11
Product Categories/Family for 8-OHdG elisa kit	Assay Kits; ELISA Kits; Cancer; Oxidative Stress; Cell Signaling; Post-translational Modifications; Oxidation; Cell Signaling; Epigenetics and Nuclear Signaling; DNA/RNA; DNA Damage and Repair
References	1. Maxey K.M., Maddipati K.R., Birkmeier J. (1992) J Clin Immunoassay 15: 116-120. 2. Pradelles P., Grassi J., Maclouf J. (1990) Methods Enzymol. 187: 24-34. 3. Maclouf J., Grassi J., Pradelles P. (1987) Dev Immunoassay Tech Meas eicosanoids. 4. Lin H., et al. (2004) Biochem J. 380: 541-548. 5. Bogdanov M.B., et al. (1999) Free Radic Biol Med. 27(5/6): 647-666. 6. Lee J., et al. (2005) Hypertension 45: 986-990. 7. Leinonen, J., et al. (1997) FEBSLett. 417: 150-152. 8. Endo K., et al. (2006) J. Atheroscler. Thromb. 13:68-75. 9. Kuo H., et al. (2007) Mutat Res. 631:62-68. 10. Shen J., et al. (2007) Cancer 109: 574-580. 11. Beckman K.B., Ames B.N. (1997) J Biol Chem 272: 19633-19636. 12. Epe B., et al. (1996) Nucleic Acids Res 24: 4105-4110. 13. Spencer J.P.E., et al. (1995) FEBS Lett 374: 233-236. 14. Floyd R.A. (1990) FASEB J 4: 2587-2597.

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/elisa-kits/dna-damage-8-ohdg/17809>