

OxiSelect Oxidative RNA Damage (8-OHG Quantitation) ELISA Kit

OxiSelect Oxidative RNA Damage ELISA Kit (8-OHG Quantitation) (96 tests)

CATALOG #
AAA44552

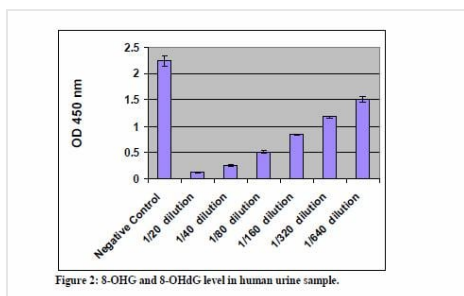
PRODUCT SYNONYMS

OxiSelect Oxidative RNA Damage (8-OHG Quantitation); OxiSelect Oxidative RNA Damage ELISA Kit (8-OHG Quantitation) (96 tests); OxiSelect Oxidative RNA Damage (8-OHG Quantitation) elisa kit

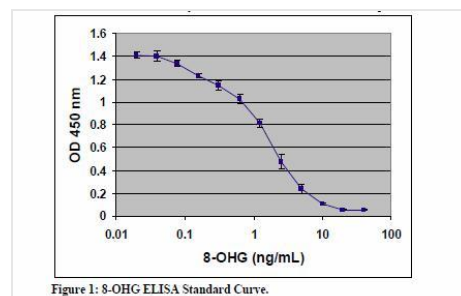
PRODUCT SPECIFICATIONS

Samples	Urine, serum, cerebrospinal fluid or other cell or tissue RNA samples
Assay Type	Quantitative Competitive
Preparation and Storage	Upon receipt, aliquot and store the 8-OHG Standard at -20 degree C and the 8-OHG Conjugate at -80 degree C to avoid multiple freeze/thaw cycles. Store all other components at 4 degree C until their expiration dates.

IMAGES



Application Data



Application Data

ADDITIONAL INFORMATION

Related Product Information for OxiSelect Oxidative RNA Damage (8-OHG Quantitation) elisa kit

Principle of the Assay: The Oxidative RNA Damage ELISA kit is a competitive ELISA for the quantitative measurement of 8-OHG. The unknown 8-OHG samples or 8-OHG standards are first added to an 8-OHG/BSA conjugate preabsorbed EIA plate. After a brief incubation, an anti-8-OHG monoclonal antibody is added, followed by an HRP conjugated secondary antibody. The 8-OHG content in unknown samples is determined by comparison with predetermined 8-OHG standard curve.

Background/Introduction: Free radicals and other reactive species are constantly generated in vivo and cause oxidative damage to biomolecules, a process held in check only by the existence of multiple antioxidant and repair systems as well as the replacement of damaged nuclei acids, proteins and lipids. RNA and DNA are probably the most biologically significant targets of oxidative attack. Recently, oxidative damage to RNA molecules has been described in several neurological diseases including Alzheimer's disease, Parkinson's disease, Down syndrome, dementia with Lewy bodies, prion disease, subacute sclerosing panencephalitis, and xeroderma pigmentosum. Among numerous types of RNA oxidative damage, the formation of 8-hydroxyguanosine (8-OHG) is a ubiquitous marker of oxidative stress. The OxiSelect™ Oxidative RNA Damage ELISA Kit is a competitive enzyme immunoassay developed for rapid detection and quantitation of 8-OHG in urine, serum, cerebrospinal fluid or other cell or tissue RNA samples. The quantity of 8-OHG in unknown sample is determined by comparing its absorbance with that of a known 8-OHG standard curve. The kit has an 8-OHG detection sensitivity range of 300 pg/mL to 40 ng/mL. Each kit provides sufficient reagents to perform up to 96 assays, including standard curve and unknown samples.

Product Categories/Family for OxiSelect Oxidative RNA Damage (8-OHG Quantitation) elisa kit	Oxidative Stress/Damage; DNA/RNA Damage and Repair; 8-OHG RNA Damage ELISA
References	1. Nunomura A, Perry G, Pappolla MA, Wade R, Hirai K, Chiba S and Smith MA. (1999) J Neurosci. 19, 1959-64. 2. Nunomura A, Honda K, Takeda A, Hirai K, Zhu X, Smith MA and Perry G. (2006) J Biomed Biotechnol. 2006, 82323. 3. Patel P. R, Bevan R. J, Mistry N and Lunec J. (2007) J. Free Radic Biol Med. 42, 552-558. 4. Shen J, Deininger P, Hunt J. D, and Zhao H. (2007) Cancer 109, 574-580. 5. Wu L. L, Chiou C. C, Chang P. Y and Wu J. T. (2004) Clin Chim Acta. 339, 1-9. Bazin, J. et al. (2011). Targeted mRNA Oxidation Regulates Sunflower Seed Dormancy Alleviation during Dry after-Ripening. Plant Cell 23:2196-2208.

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/oxiselect-oxidative-rna-damage-8-ohg-quantitation/44552>