

Human 8-Hydroxy-desoxyguanosine (8-OHdG) ELISA Kit



Catalog No: #EK7594

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Package Size: #EK7594-1 48T #EK7594-2 96T

Description

Product Name	Human 8-Hydroxy-desoxyguanosine (8-OHdG) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Human (Homo sapiens)
Storage	<p>The stability of ELISA kit is determined by the loss rate of activity. The loss rate of this kit is less than 5% within the expiration date under appropriate storage condition.</p> <p>The loss rate was determined by accelerated thermal degradation test. Keep the kit at 37C for 4 and 7 days, and compare O.D.values of the kit kept at 37C with that of at recommended temperature. (referring from China Biological Products Standard, which was calculated by the Arrhenius equation. For ELISA kit, 4 days storage at 37C can be considered as 6 months at 2 - 8C, which means 7 days at 37C equaling 12 months at 2 - 8C).</p>

Application Details

Detect Range:12.5-800 ng/mL

Sensitivity:6.0 ng/mL

Sample Type:Serum, Plasma, Other biological fluids

Sample Volume: 1-200 µL

Assay Time:1-4.5h

Detection wavelength:450 nm

Product Description

Detection Method:SandwichTest principle:This assay employs a two-site sandwich ELISA to quantitate 8-OHdG in samples. An antibody specific for 8-OHdG has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and any8-OHdG present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for 8-OHdG is added to the wells. After washing, Streptavidin conjugated Horseradish Peroxidase (HRP) is added to the wells. Following a wash to remove any unbound avidin-enzyme reagent, a substrate solution is added to the wells and color develops in proportion to the amount of 8-OHdG bound in the initial step. The color development is stopped and the intensity of the color is measured.

Product Overview:8-oxo-7,8-dihydro-2 deoxyguanosine(8-OHdG), is probably the most important product of "oxidative stress in DNA. Its concentration in DNA is, in fact, a quantitative analysis of the degree of DNA damage that an organism has undergone. Due to the importance of 8-OHdG of nucleic acid in mutagenesis, carcinogenesis and aging, numerous chemical and biological investigations have been made on this subject in the past time. Kuchino and co-workers have found that 8-OHdG residue in DNA is misreading during the process of DNA replication. Recently, some reports have been presented on high 8-OHdG levels in patients suffering from various diseases such as chronic hepatitis, Fanconi s anemia, diabetes mellitus and Helicobacter pylori infections. As a result, 8-OHdG is a useful marker for the study of DNA damage arising from reactive oxygen species and is of great significance for cancer research.

Note: This product is for in vitro research use only