8-Hydroxyguanosine polyclonal antibody

8-Hydroxydeoxyguanosine (8OHdG) is a modified base that occurs in DNA due to attack by hydroxyl radicals that are formed as byproducts and intermediates of aerobic metabolism and during oxidative stress. There is increasing evidence to support the involvement of free radical reactions in the damage of biomolecules that eventually lead to several diseases in humans, such as atherosclerosis, cerebral and heart ischemia-reperfusion injury, cancer, rheumatoid arthritis, inflammation, diabetes, aging and neurodegenerative conditions, such as Alzheimer's disease. 8OHdG has become increasing popular as a sensitive, stable and integral marker of oxidative damage in cellular DNA. Biomonitoring in humans has demonstrated that 8OHdG can be excreted in the urine and that a significant increase is caused by exposure to tobacco smoke and ionizing radiation. Because 8OHdG is so well correlated with oxidative stress and damage to DNA, which leads to degenerative disease states, the development of an antibody that can be used to study DNA damage has numerous applications. In addition to the direct study of DNA damage within cells, this antibody has applications in the development of immunoassays that can monitor 8OHdG excretion in the urine and serve as a biomarker of oxidative stress. Industrial uses may extend to the dietary supplement manufacturers, who could benefit from an immunoassay that could be used to test the effectiveness of antioxidants and other nutraceuticals.

This antibody is covered by our Worry-Free Guarantee.

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ALX-210-802-R100	100µl

Manuals, SDS & CofA View Online »

Handling & Storage

Handling	Avoid freeze/thaw cycles.
Short Term Storage	+4°C
Long Term Storage	-20°C
Shipping	Blue Ice

Regulatory Status

RUO - Research Use Only

Product Details

Application	ELISA, IHC (FS), IHC (PS)
Crossreactivity	Partially cross-reacts with 8-mercaptoguanosine and slightly with 8-bromoguanosine. Does not cross-react with other naturally occuring nucleotides.
Formulation	Liquid. Neat serum.
Host	Goat
Immunogen	Synthetic 8-hydroxyguanosine-conjugate.
Recommendation Dilutions/Conditions	ELISA (1:250,000)Immunohistochemistry (paraffin sections, 1:200)Suggested dilutions/conditions may not be available for all applications.Optimal conditions must be determined individually for each application.
Species Reactivity	Species independent
Specificity	Recognizes 8-hydroxyguanosine and 8-hydroxy-2′-deoxyguanosine.
Worry-free Guarantee	**This antibody is covered by our Worry-Free Guarantee .**

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