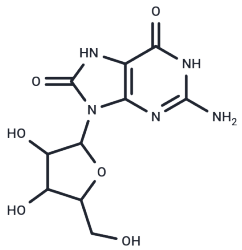
Data Sheet (Cat.No.TQ0154)

TargetMol

8-Hydroxyguanosine

Chemical Properties



CAS No. : 3868-31-3

Formula: C10H13N5O6

Molecular Weight: 299.24

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	8-hydroxyguanosine (8-OHG) is a marker for measuring the rate of oxidative damage to nucleic acids and lipids.
Targets(IC50)	Endogenous Metabolite,Interleukin
In vivo	The concentration of 8-OHG in CSF in Parkinson's disease (PD) patients is approximately three-fold that in controls. The concentration of 8-OHG in CSF decreased significantly with the duration of disease. However, the concentration of 8-OHG in serum was not significantly altered in PD patients compared to that in controls.

Solubility Information

Solubility	DMSO: 240 mg/mL (802.03 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 5 mg/mL (16.71 mM),Sonication is recommended. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.3418 mL	16.709 mL	33.418 mL
5 mM	0.6684 mL	3.3418 mL	6.6836 mL
10 mM	0.3342 mL	1.6709 mL	3.3418 mL
50 mM	0.0668 mL	0.3342 mL	0.6684 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Harman SM, et al. Urinary excretion of three nucleic acid oxidation adducts and isoprostane F(2)alpha measured by liquid chromatography-mass spectrometry in smokers, ex-smokers, and nonsmokers. Free Radic Biol Med. 2003 Nov 15;35(10):1301-9.

Abe T, et al. Alteration of 8-hydroxyguanosine concentrations in the cerebrospinal fluid and serum from patients with Parkinson's disease. Neurosci Lett. 2003 Jan 16;336(2):105-8.