

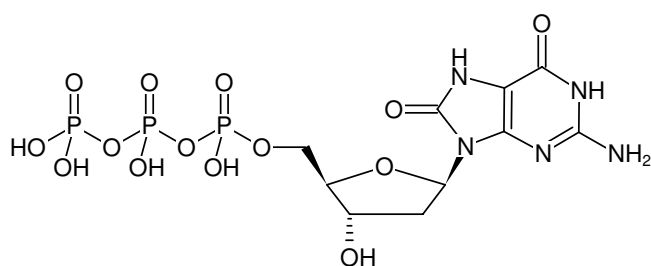
**8-Oxo-dGTP**

8-Hydroxy-dGTP

8-Oxo-2'-deoxyguanosine-5'-triphosphate, Sodium salt

8-Hydroxy-2'-deoxyguanosine-5'-triphosphate, Sodium salt

Cat. No.	Amount
NU-1117S	30 µl (10 mM)
NU-1117L	5 x 30 µl (10 mM)



Structural formula of 8-Oxo-dGTP

For research use only!**Shipping:** shipped on blue ice**Storage Conditions:** store at -20 °C

Short term exposure (up to 1 week cumulative) to ambient temperature possible.

Shelf Life: 12 months after date of delivery**Molecular Formula:** C₁₀H₁₆N₅O₁₄P₃ (free acid)**Molecular Weight:** 523.18 g/mol (free acid)**Exact Mass:** 522.99 g/mol (free acid)**CAS#:** 139307-94-1**Purity:** ≥ 95 % (HPLC)**Form:** clear aqueous solution**Concentration:** 10 mM - 11 mM**pH:** 7.5 ± 0.5**Spectroscopic Properties:** λ_{max} 245 nm, ε 12.3 L mmol⁻¹ cm⁻¹ (Tris-HCl pH 7.5)**Applications:**Influence on base excision repair^[1]Influence on erroneous incorporation by DNA-polymerases^[2]Hydrolysis to 8-oxo-dGMP by E.-coli MutT^[3]Triggering cell senescence through formation of ROS^[4]**Selected References:**

[1] Suzuki *et al.* (2010) Effect of base excision repair proteins on mutagenesis by 8-oxo-7, 8-dihydroguanine (8-hydroxyguanine) paired with cytosine and adenine. *DNA Repair* **9**:542.

[2] Katafuchi *et al.* (2010) Critical amino acids in human DNA polymerases η and κ involved in erroneous incorporation of oxidized nucleotides. *Nucleic Acids Res.* **38**:859.

[3] Nakamura *et al.* (2010) Structural and dynamic features of the MutT protein in the recognition of nucleotides with the mutagenic 8-oxoguanine base. *J. Biol. Chem.* **285**:444.

[4] Raia *et al.* (2009) Continuous elimination of oxidized nucleotides is necessary to prevent rapid onset of cellular senescence. *PNAS USA* **106**:169.

Yoshida H. *et al.* (2011) Increase in CpG DNA-induced inflammatory responses by DNA oxidation in macrophages and mice. *Free Radic Biol Med.* **51** (2):424.

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