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DINUCLEOTIDE STANDARD Thymine Glycol Guanine Dimer d(T^gpG)

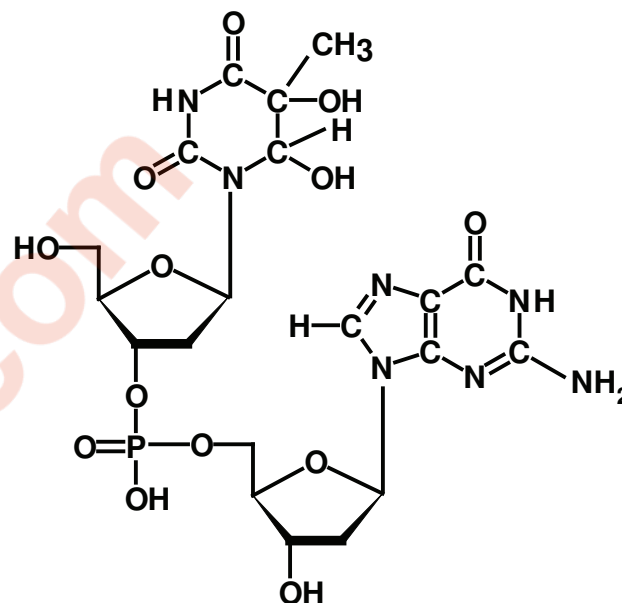
This product was manufactured in a facility which has a Quality Management System that is certified as being in compliance with ISO 13485.

ZMC Catalog #: 0801214

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FOR RESEARCH USE ONLY. Not for *in vitro* Diagnostic Use

Thymine Glycol Guanine Dimer d(T^gpG)



d(T^gpG): Dinucleotide Monophosphate where T^g is *cis*-5R, 6S-thymidine glycol.^(1, 2)

PRODUCT CHARACTERISTICS

d(T^gpG) is useful as an internal standard for end-labeling as well as LC-MS analysis in the investigation of the nature and consequences of DNA damage. d(T^gpG) has been chemically synthesized to improve reliability and accuracy and purified by HPLC.⁽³⁾ Identification of the product and an index of its purity was accomplished by proton NMR spectroscopy at 400 MHz.⁽⁴⁾

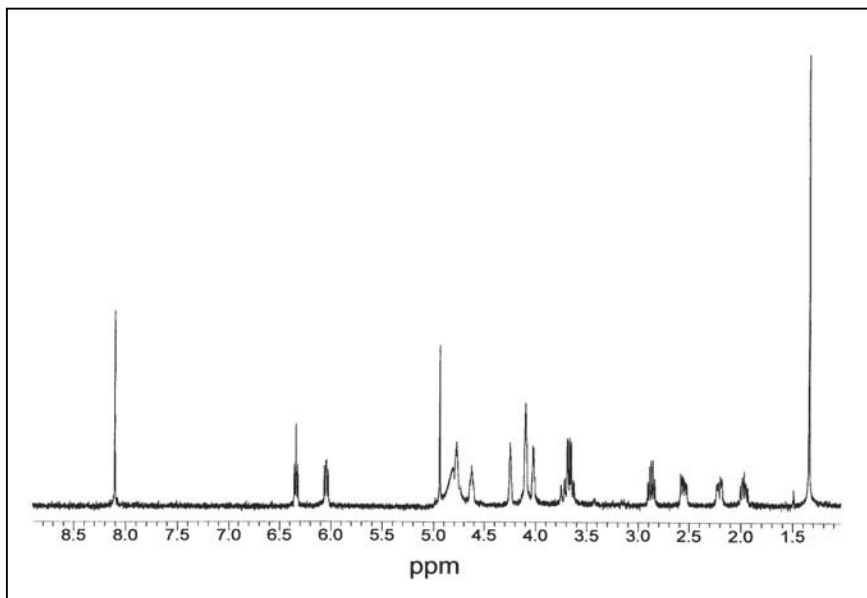
RECOMMENDED USAGE

d(T^gpG) may be used as an internal standard for various quantitations. This lyophilized product is supplied at 1.0 ODU (~50 µg) as a mixture of the *cis* isomers. Reconstitute in water to 1.0 ml.

STORAGE AND STABILITY

Lyophilized product is stable for 1 year when stored at 2-8°C. Recommend aliquoting and storing at -20°C when resuspended in water.

NMR Spectrum



REFERENCES

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- (2) J.D. Baleja, G.W. Buchko, M. Weinfeld and B.D. Sykes, Journal of Biomolecular Structure and Dynamics (1993) 10, 747-762.
- (3) A.E. Maccubbin, H.B. Patzyc, N. Ersing, Budzinski, J.B. Dawidzik, J.C. Wallace, H. Iijima, H. C. Box, Biochimica et Biophysica Acta 1454 (1999) 80-88.
- (4) H.C. Box, H.G. Freund, E.E. Budzinski, J.C. Wallace and A.E. Maccubbin, Radiation Research, 141. 91-94 (1995)

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