

This document is provided for product evaluation purposes only. It is not intended to be used in place of the package insert shipped with the product.



DINUCLEOTIDE STANDARD Thymine Glycol Adenine Dimer d(T^gpA)

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

ZeptoMetrix Corporation
872 Main Street
Buffalo, New York 14202

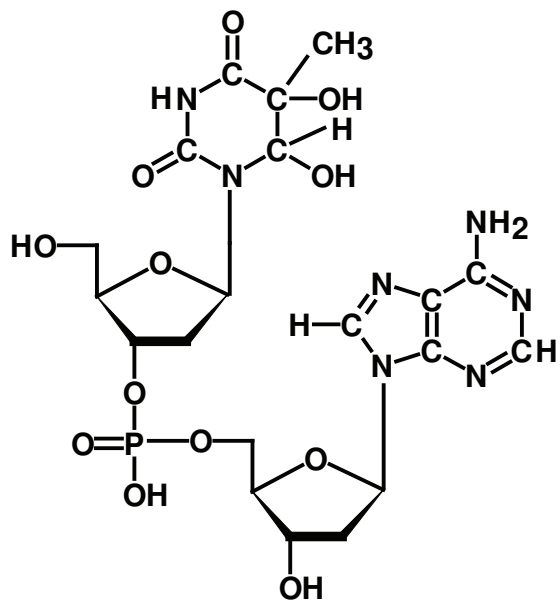
Office Phone: 716-882-0920
Fax: 716-882-0959
Customer Service: 800-274-5487
www.zeptometrix.com
e-mail: support@zeptometrix.com
custserv@zeptometrix.com

ZMC Catalog #: 0801217

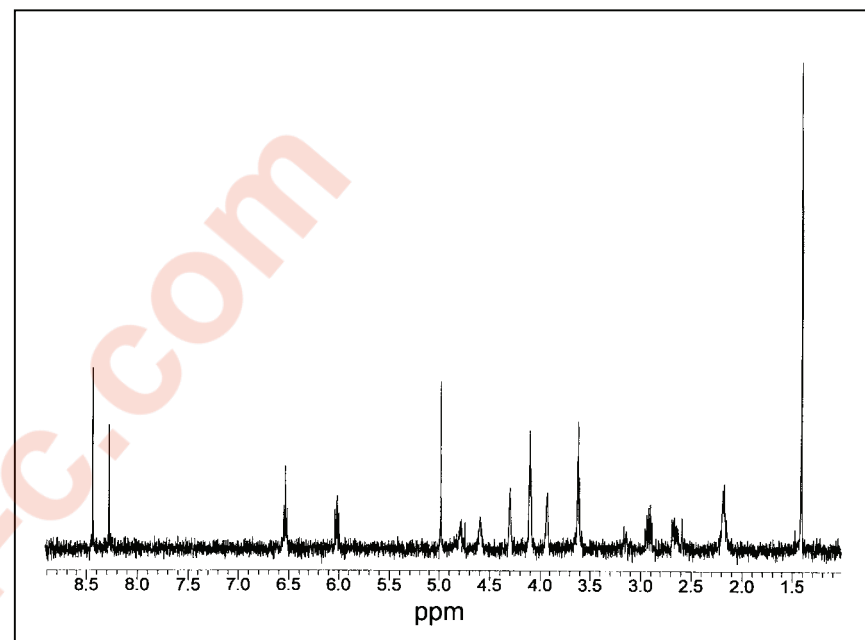
The development of this product was supported in part by grants from the National Cancer Institute (R42 CA80451) and the New York Center for Biotechnology.

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

Thymine Glycol Adenine Dimer d(T^gpA)



NMR Spectrum



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

PRODUCT CHARACTERISTICS

d(T^gpA) 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^gpA) 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^gpA) 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.

REFERENCES

- (1) E. Schroder, E.E. Budzinski, J.C. Wallace, J.D. Zimbrick and H.C. Box, International Journal of Radiation Biology (1995) 68, 509-523.
- (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. Patrycz, 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)