

Guanosine Pentaphosphate

[View the current Guanosine Pentaphosphate InDepth page on BioPortfolio.com](http://www.bioportfolio.com/indepth/Guanosine_Pentaphosphate.html) (PDF)

(http://www.bioportfolio.com/indepth/Guanosine_Pentaphosphate.html) - Regularly Updated.

Recent Publications on Guanosine Pentaphosphate:



- [When DNA replication and protein synthesis come together.](#)
In all organisms, DNA and protein are synthesized by dedicated, but... 17th October, 2009
Universite Paris-Sud 11, CNRS UMR 8621, Institut de Genetique et- Trends Biochem Sci. 2009
Sep;34(9):429-34. Epub 2009 Sep 2. ([DOI Direct Link](#))
- [Bacterial nucleotide-based second messengers.](#)
In all domains of life nucleotide-based second messengers transduce... 18th August, 2009
Institut fur Biologie - Mikrobiologie, Freie Universitat Berlin, Germany.- Curr Opin Microbiol. 2009
Apr;12(2):170-6. Epub 2009 Mar 21. ([DOI Direct Link](#))
- [Transcription activity of individual rrn operons in Bacillus subtilis mutants deficient in \(p\)ppGpp synthetase genes, relA, yjbM, and ywaC.](#)
In Bacillus subtilis a null mutation of the relA gene, whose gene product... 16th July, 2009
Research Information Center for Extremophile, College of Science, Rikkyo- J Bacteriol. 2009
Jul;191(14):4555-61. Epub 2009 May 15. ([DOI Direct Link](#))
- [Magic spot: \(p\) ppGpp.](#)
Guanosine 5'-(tri)diphosphate, 3'-diphosphate [(p) ppGpp] is a small... 30th June, 2009
Institute of Modern Biopharmaceuticals, School of Life Sciences, Education- J Cell Physiol. 2009
Aug;220(2):297-302. ([DOI Direct Link](#))
- [Stringent response in Vibrio cholerae: genetic analysis of spoT gene function and identification of a novel \(p\)ppGpp synthetase gene.](#)
RelA and SpoT of Gram-negative organisms critically regulate cellular... 22nd May, 2009
Infectious Diseases and Immunology Division, Indian Institute of Chemical- Mol Microbiol. 2009
Apr;72(2):380-98. Epub 2009 Mar 4. ([DOI Direct Link](#))
- [SpoT-triggered stringent response controls usp gene expression in Pseudomonas aeruginosa.](#)
The universal stress proteins (Usps) UspK (PA3309) and UspN (PA4352) of... 20th January, 2009
Institute of Microbiology, Technische Universitat Braunschweig,- J Bacteriol. 2008
Nov;190(21):7189-99. Epub 2008 Sep 5. ([DOI Direct Link](#))
- [\(p\)ppGpp: still magical?](#)
The fundamental details of how nutritional stress leads to elevating... 17th December, 2008
Laboratory of Molecular Genetics, National Institute of Child Health and- Annu Rev Microbiol.
2008;62:35-51. ([DOI Direct Link](#))
- [Mutation in the rel gene of Sorangium cellulosum affects morphological and physiological differentiation.](#)
Interruption of the (p)ppGpp synthetase gene (rel) of Sorangium cellulosum... 30th August, 2008

- Department of Microbiology and Molecular Biology, University of Giessen,- Mol Microbiol. 2008 Jul;69(1):254-66. Epub 2008 May 26. ([DOI Direct Link](#))
- [Global regulation by \(p\)ppGpp and CodY in Streptococcus mutans.](#)
*The RelA, RelP, and RelQ enzymes are responsible for the production of the...*13th August, 2008
Department of Microbiology and Immunology and Center for Oral Biology,- J Bacteriol. 2008 Aug;190(15):5291-9. Epub 2008 Jun 6. ([DOI Direct Link](#))
 - [Molecular characterization of vibrio cholerae DeltarelA DeltaspoT double mutants.](#)
*In Escherichia coli cellular levels of pppGpp and ppGpp, collectively...*12th June, 2008
Infectious Diseases and Immunology Division, Indian Institute of Chemical- Arch Microbiol. 2008 Mar;189(3):227-38. Epub 2007 Oct 30. ([DOI Direct Link](#))
 - [RelA functionally suppresses the growth defect caused by a mutation in the G domain of the essential Der protein.](#)
*A unique bacterial GTPase, Der, containing two tandem GTP-binding domains,...*15th May, 2008
Department of Biochemistry, Robert Wood Johnson Medical School, 675 Hoes- J Bacteriol. 2008 May;190(9):3236-43. Epub 2008 Feb 22. ([DOI Direct Link](#))
 - [Streptomyces clavuligerus relA-null mutants overproduce clavulanic acid and cephamycin C: negative regulation of secondary metabolism by \(p\)ppGpp.](#)
*The (p)ppGpp synthetase gene, relA, of Streptomyces clavuligerus was...*2nd May, 2008
Area de Microbiologia, Facultad de Ciencias Biologicas y Ambientales,- Microbiology. 2008 Mar;154(Pt 3):744-55. ([DOI Direct Link](#))
 - [Synthesis of Leishmania cap-4 intermediates, cap-2 and cap-3.](#)
*Synthesis of Leishmania mRNA 5'-cap analogs, m(7)Gpppm(2)(6)AmpAm (cap-2),...*21st March, 2008
Department of Biophysics, Institute of Experimental Physics, Warsaw- Nucleosides Nucleotides Nucleic Acids. 2007;26(10-12):1339-48. ([DOI Direct Link](#))
 - [Selective fluorescent chemosensor for the bacterial alarmone \(p\)ppGpp.](#)
*We have developed the first selective fluorescent chemosensor (PyDPA) for...*20th February, 2008
Department of Chemistry, College of Natural Sciences, Seoul National- J Am Chem Soc. 2008 Jan 23;130(3):784-5. Epub 2008 Jan 1. ([DOI Direct Link](#))
 - [Structure of the PPX/GPPA phosphatase from Aquifex aeolicus in complex with the alarmone ppGpp.](#)
*The crystal structure of the prototype exopolyphosphatase/guanosine...*15th February, 2008
Biostructural Research, Department of Medicinal Chemistry, University of- J Mol Biol. 2008 Feb 1;375(5):1469-76. Epub 2007 Dec 4. ([DOI Direct Link](#))

BioNews Results for Guanosine Pentaphosphate

- [Platelet Cyclic Guanosine Monophosphate as a Biomarker of Phosphodiesterase Type 5 Inhibitor Efficacy in the Treatment of Erectile Dysfunction: A Randomized Placebo-Controlled Study](#)
MDLinx: Nov 5 2009 10:25AM Matching: guanosine
- [TopAbstracts in Erectile Dysfunction 10/20/2009](#)
Doctors Guide: Oct 21 2009 6:57PM Matching: guanosine



Guanosine Pentaphosphate Patents:

- 7510854- [Corynebacterium glutamicum genes encoding metabolic pathway proteins](#)
- 4141972- [Purine nucleoside 5'-phosphate \(mono, di or tri\) 3'\(2'\)-diphosphates and processes for their preparation](#)
- 4152209- [Nucleotide pyrophosphotransferase and method of preparation](#)
- 5998159- [Methods for screening for antibiotics](#)
- 6562801- [PpGpp and pppGpp as immunomodulatory agents](#)
- 6892139- [Determining the functions and interactions of proteins by comparative analysis](#)
- 7060458- [Nucleic acid and amino acid sequences relating to Staphylococcus epidermidis for diagnostics and therapeutics](#)
- 7074596- [Synthesis and use of anti-reverse mRNA cap analogues](#)
- 7183105- [Eubacterial minicells and their use as vectors for nucleic acid delivery and expression](#)
- 7291482- [Mutations affecting plasmid copy number](#)
- 7332310- [Mutant of homoserine dehydrogenase from Corynebacterium and DNA encoding thereof](#)
- 7439050- [Corynebacterium glutamicum genes encoding diaminopimelate epimerase](#)
- 4059487- [Purine nucleoside 5'-phosphate \(mono, di or tri\) 3'\(2'\)-diphosphates and processes for their preparation](#)

Resources from the [NCBI](#) used in this document, [NCBI's standard disclaimer applies](#).

Nothing in this document should be used in place of personal medical advice from your own qualified medical practitioner. See BioPortfolio.com [User Agreement](#)

Send comments and feedback to:

Peter Barfoot Managing Director, BioPortfolio Ltd.

UK Tel: (+44) 1300 321501

USA Voicemail and Fax: (+1) 415 680 2472

[Peter Barfoot peter.barfoot@bioportfolio.com](mailto:peter.barfoot@bioportfolio.com)

All rights reserved. All other trademarks recognized.

BioPortfolio Limited is registered in England & Wales at Stafford House, 10 Prince of Wales Road, Dorchester, Dorset, DT1 1PW, UK. No.3312883 VAT No. GB 744 6483 10

Copyright 1997-2009 - BioPortfolio Limited.

