This article was downloaded by:

On: 27 January 2011

Access details: Access Details: Free Access

Publisher Taylor & Francis

Informa Ltd Registered in England and Wales Registered Number: 1072954 Registered office: Mortimer House, 37-

41 Mortimer Street, London W1T 3JH, UK



Nucleosides, Nucleotides and Nucleic Acids

Publication details, including instructions for authors and subscription information: http://www.informaworld.com/smpp/title~content=t713597286

Synthesis of Some Quinolinium Nucleosides

L. Kemps^a; E. L. Esmans^a; R. Dommisse^a; J. A. Lepoivre^a; F. C. Alderweireldt^a

^a Laboratory for Organic Chemistry, University of Antwerp (R.U.C.A.), ANTWERPEN, Belgium

To cite this Article Kemps, L., Esmans, E. L., Dommisse, R., Lepoivre, J. A. and Alderweireldt, F. C.(1987) 'Synthesis of Some Quinolinium Nucleosides', Nucleosides, Nucleotides and Nucleic Acids, 6:1,387-388

To link to this Article: DOI: 10.1080/07328318708056230 URL: http://dx.doi.org/10.1080/07328318708056230

PLEASE SCROLL DOWN FOR ARTICLE

Full terms and conditions of use: http://www.informaworld.com/terms-and-conditions-of-access.pdf

This article may be used for research, teaching and private study purposes. Any substantial or systematic reproduction, re-distribution, re-selling, loan or sub-licensing, systematic supply or distribution in any form to anyone is expressly forbidden.

The publisher does not give any warranty express or implied or make any representation that the contents will be complete or accurate or up to date. The accuracy of any instructions, formulae and drug doses should be independently verified with primary sources. The publisher shall not be liable for any loss, actions, claims, proceedings, demand or costs or damages whatsoever or howsoever caused arising directly or indirectly in connection with or arising out of the use of this material.

SYNTHESIS OF SOME QUINOLINIUM NUCLEOSIDES.

L. Kemps*, E.L. Esmans, R. Dommisse, J.A. Lepoivre and F.C. Alderweireldt

University of Antwerp (R.U.C.A.), Laboratory for Organic Chemistry, Groenenborgerlaan 171, B-2020 ANTWERPEN, Belgium

Abstract: The preparation of a series of quinolinium nucleosides with substituents on the 3-, 4- and 6-position is described.

R = H, 3Me, 4Me, 6Me, 3CH₂OH, 4CH₂OH, 6CH₂OH

In analogy with the synthesis of pyridinium nucleosides by Freyne et al. 1,2 , the benzoylated quinolinium nucleosides $(\underline{2-8})$ were obtained by direct condensation of 3,5-di-0-benzoyl- β -D-ribofuranosyl chloride ($\underline{1}$) with the corresponding quinoline derivatives.

Subsequent treatment of these benzoylated quinolinium nucleosides with methanolic ammonia gave the corresponding quinolinium nucleosides (9-15) in high yield.

388 KEMPS ET AL.

Separation of the diastereoisomers was achieved by H.P.L.C. on a reversed phase column.

All compounds were analysed and identified by NMR and DCI mass spectrometry.

ACKNOWLEDGEMENTS.

This work is supported by N.A.T.O. grant 824/84. We thank Prof.Dr.M.J.O.Anteunis (R.U.Ghent) for the facilities on the 360 MHz 1 H-nmr spectrometer.

REFERENCES.

- E.J.Freyne, E.L.Esmans, J.A.Lepoivre, F.C.Alderweireldt, Carbohyd.Res., 78, 235 (1980).
- E.J.Freyne, E.L.Esmans, J.A.Lepoivre, F.C.Alderweireldt,
 J.Carbohyd.Nucleos.&Nucleot., 8, 261 (1981).