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Structure and conformations of stereoisomeric 1,5;2,3-bis-O-(N-diethylamidothionephosphatq--β-D-ribofuranosides from1H,31P, and13C NMR spectral data

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Abstract

1. The preferred conformations of the ribofuranose and 1,3,5,2-trioxaphosphepane rings in stereoisomeric 1,5;2,3-bis-O-(N-diethylamidothionephosphato)-β-D-ribofuranosides are the twisted envelope1TO and the chair C5 CO 1 C 1 conformations, respectively. 2. The conformations of the dioxaphospholane ring in the indicated compounds correspond to the twisted envelope P2 TO 2 and O3TP 2 conformations, distinguished by the cis or trans orientations of the O2P2O3 fragment relative to the H2 and H3 atoms of the ribofuranose ring.

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