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Synthesis and in vitro growth inhibitory activity of novel silyl- and trityl-modified nucleosides

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Abstract

Seventeen silyl- and trityl-modified (5'-O- and 3',5'-di-O-) nucleosides were synthesized with the aim of investigating the in vitro antiproliferative activities of these nucleoside derivatives. A subset of the compounds was evaluated at a fixed concentration of 100 μM against a small panel of tumor cell lines (HL-60, K-562, Jurkat, Caco-2 and HT-29). The entire set was also tested at varying concentrations against two human glioma lines (U373 and Hs683) to obtain GI(sub50) values, with the best results being values of 25 μM.