Synthesis and Enzymatic Evaluation of Nucleosides Derived from 5-Iodo-2'-Halo-2'-Deoxyuridines

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The synthesis of new nucleosides by alkenylation of 5-iodo-2'-halo-2'-deoxyuridines with E-(1-tributylstannyl)-propene-1-ol via STILLE-coupling is described. The new compounds are characterized by ^{1}H NMR and elemental analysis. All nucleosides are evaluated by an enzymatic assay to be substrates of herpes simplex virus type 1 thymidine kinase (HSV-1 TK) and compared with uridine, thymidine and (E)-5-(2-iodovinyl)-2'-fluoro-2'-deoxyuridine (IVFRU).

Key words: 5-Iodo-deoxyuridines, STILLE-coupling, HSV-1 Thymidine Kinase