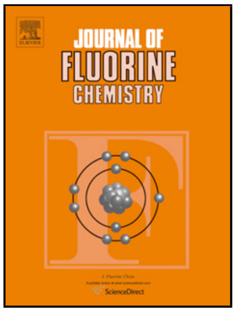

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1,3-Dipolar cycloaddition in the synthesis of trifluoromethyl-substituted isoxazolidinyl derivatives of nucleobases

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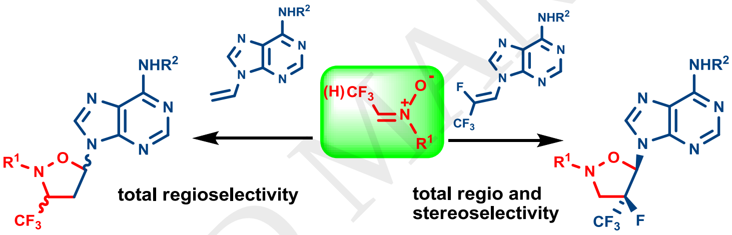
Graphical Abstract

1,3-Dipolar cycloaddition is developed to afford two series of potentially bioactive trifluoromethylated isoxazolidinyl derivatives of nucleobases.



Highlights

- Synthesis of a new class of fluorinated isoxazolidinyl nonhydroxyl nucleoside analogues is described
- Cycloaddition reactions proceed witch complete regioselectivity
- Reactions of *N*-vinyl nucleobases with fluorinated nitrones show very high diastereoselectivity