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MEISENHEIMER COMPLEXES IN SYNTHESIS AND TRANSFORMATIONS OF AZIDOPURINE DERIVATIVES

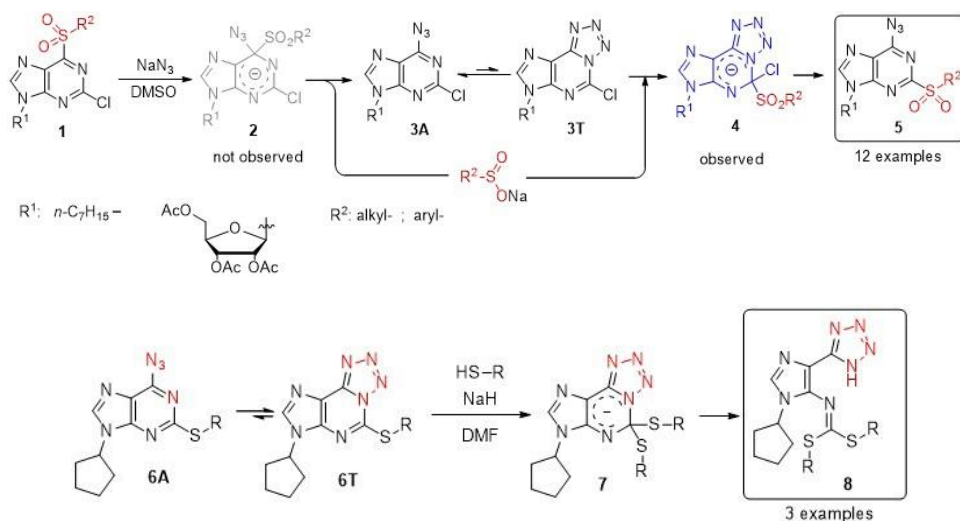
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Purine derivatives are widely studied due to their biological properties. They are already being used in treatment of cancer and other malignancies [1, 2].

We have observed a sulfonyl group dance when substrate **1** was treated with NaN_3 . The transformation which lead to product **5** can be explained by azido-tetrazolo tautomerism. The latter activates purine cycle towards $\text{S}_\text{N}\text{Ar}$ reaction at C2. Reaction mechanism and kinetics were investigated using NMR experiments, ^{15}N labelling and FTIR analysis.



Current research now focuses on investigation and optimization of purine ring opening reaction. The reaction can be explained by the azido-tetrazolo tautomerism. It appears that the tetrazole is a better leaving group from the Meisenheimer complex **7**.

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