

Abstract

This bachelor work concerns the synthesis of hitherto unknown 2,6-disubstituted 7-deazapurine nucleosides as potential A_3 adenosine receptors agonists. Several new 7-deazapurine ribonucleosides with arylethynyl group in position 2 and benzofuryl in position 6 were prepared. The synthesis of each compound involved 7 steps. The last step of the synthesis was Sonogashira coupling, where optimization has been done.

Key words: *7-deazapurines, adenosine kinase, A_3 adenosine receptors, Sonogashira coupling*