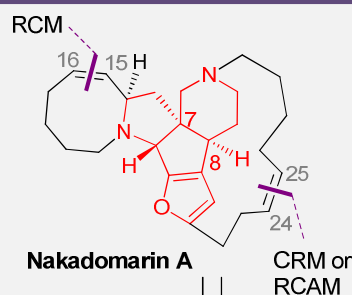


INITIAL STEPS TOWARDS THE SYNTHESIS OF NAKADOMARIN A

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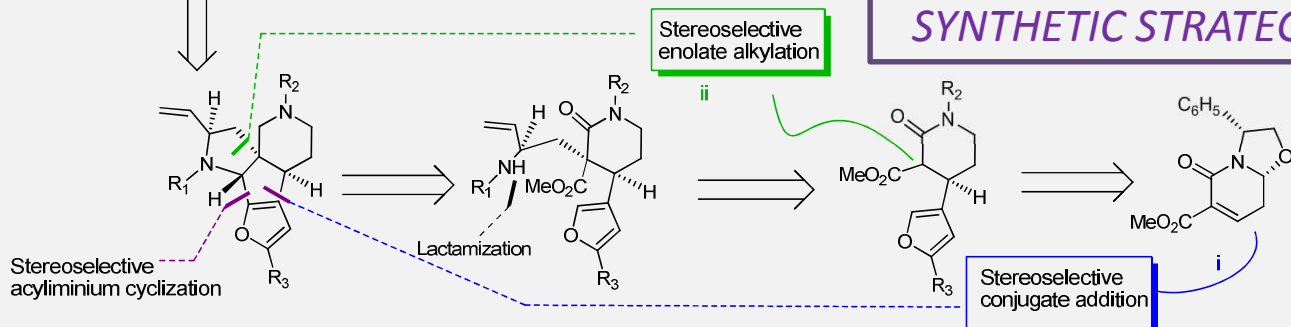
e-mail: cele.are@hotmail.it



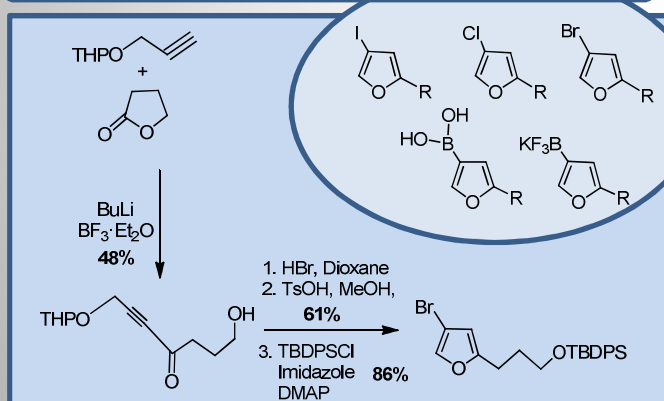
Nakadomarin A was isolated in 1997 by Kobayashi and co-workers from the marine sponge *Amphimedon* sp., collected off the Kerama Islands, Okinawa.¹ Its structure consists of an unprecedented 8/5/5/5/15/6 hexacyclic ring system containing four stereogenic centers, one of them (C-7) quaternary, and a furan ring.



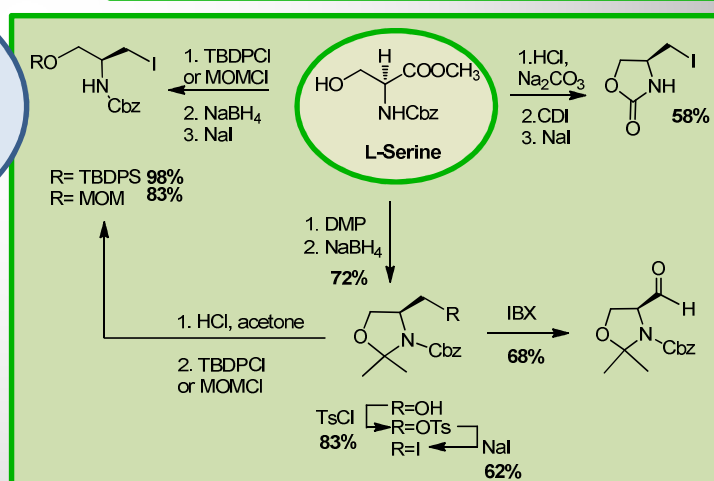
SYNTHETIC STRATEGY



Preparation of C-2 substituted furan derivatives

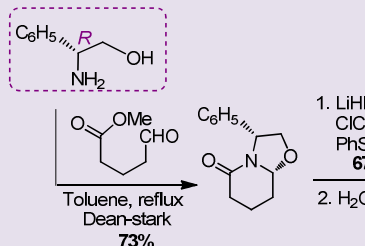


Preparation of the alkylating agents

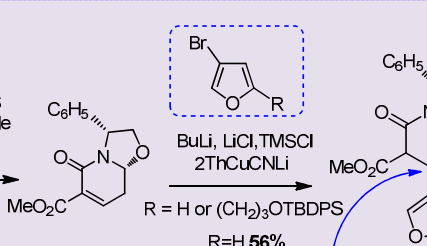


Towards the Diazatetracyclic Core

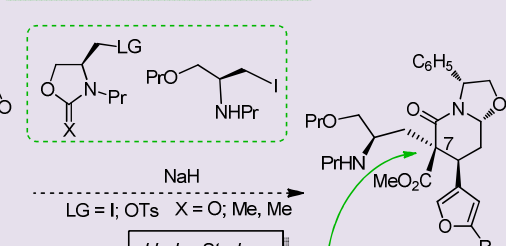
(R)-PHENYLGLYCINOL: CHIRAL LATENT FORM OF NH₃



INTRODUCTION OF THE FURAN RING BY STEREOSELECTIVE CONJUGATE ADDITION



GENERATION OF THE QUATERNARY STEREOCENTER



Generation of the C-8 stereocenter

Generation of the C-7 stereocenter

1- Kobayashi, J.; Watanabe, D.; Kawasaki, N.; Tsuda, M. *J. Org. Chem.* 1997, 62, 9236

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