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**Keywords : Methodology, Quaternary Trifluoromethyl Group, Diastereoselective Synthesis,
Small Chiral Building Blocks, Amino-Acids.**

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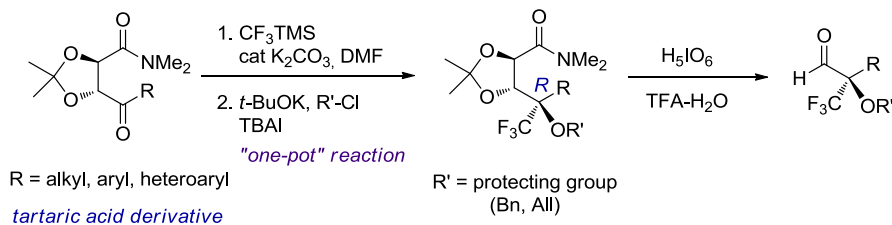
Enantiopure Quaternary Trifluoromethyl-Containing Synthons From Tartaric Acid

Aim: Synthesis of various enantiopure building-blocks containing a quaternary trifluoromethyl substituent.

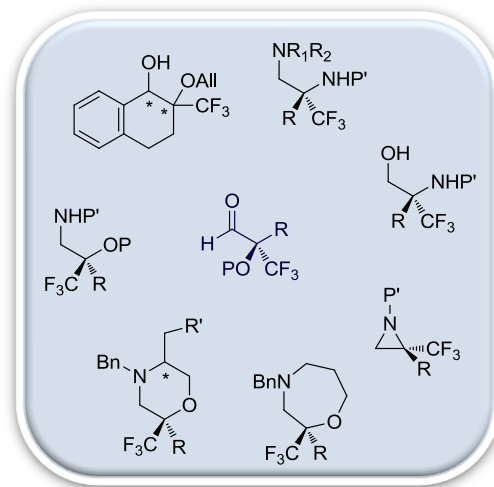
Method: Use of natural tartaric acid as key starting material for the diastereoselective synthesis of the target synthons

Publications: *J. Org. Chem.* **2008**, 7990. *Eur. J. Org. Chem.* **2009**, 3726. *Eur. J. Org. Chem.* **2010**, 275. *Org. Biomol. Chem.* **2011**, 1160.

Synthesis of the key intermediates, the α -CF₃- α -alkoxy-aldehydes :



Exemples of prepared enantiopure synthons from α -CF₃- α -alkoxy-aldehydes :

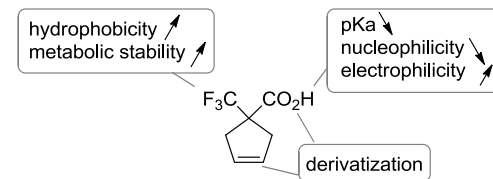


1-(Trifluoromethyl)cyclopent-3-enecarboxylic Acid Derivatives: Platforms for Bifunctional Cyclic Trifluoromethyl Building Blocks

Aim : Synthesis of cyclic bifunctional derivatives containing a quaternary trifluoromethyl group in α -position to the carboxylic acid function.

Method: Preparation of the key intermediate, the 1-(trifluoromethyl)cyclopentenecarboxylic acid, using two approaches and further functionalizations of the double bond.

Publications: *Org. Lett.* **2006**, 4323. *Eur. J. Org. Chem.* **2012**, 509.



1-(trifluoromethyl)cyclopent-3-enecarboxylic acid

Synthesis of 1-(trifluoromethyl)cyclopent-3-enecarboxylic acid :

Exemples of bifunctional synthons prepared from 1-(trifluoromethyl)cyclopent-3-enecarboxylic acid :

