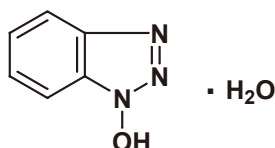


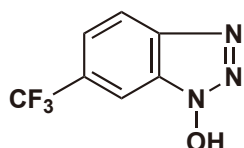
Additives for Condensation Reactions

Triazole Derivatives

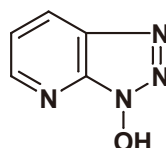
Triazole derivatives can reduce the racemization in condensation reactions.



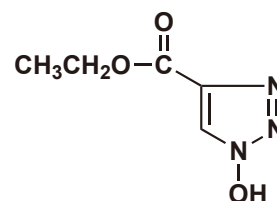
1-Hydroxybenzotriazole Monohydrate (HOBt)
25g / 500g
[H0468]



1-Hydroxy-6-(trifluoromethyl)benzotriazole
1g / 5g
[H1454]

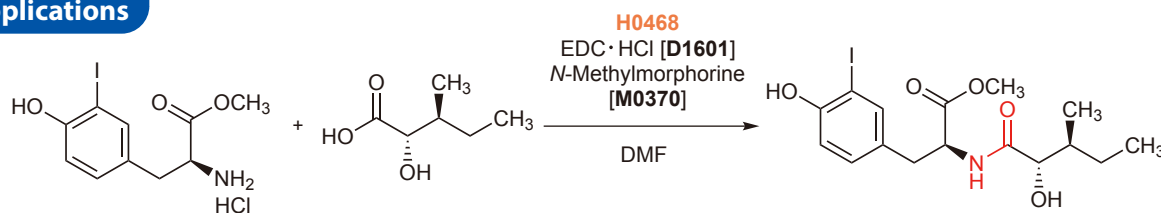


3H-1,2,3-Triazolo[4,5-b]pyridin-3-ol (HOAt)
1g / 5g / 25g
[T1673]



Ethyl 1-Hydroxy-1H-1,2,3-triazole-4-carboxylate
1g / 5g
[E0901]

Applications

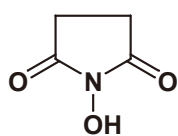


M. Inoue, H. Sakazaki, H. Furuyama, M. Hirama, *Angew. Chem. Int. Ed.* **2003**, 42, 2654.

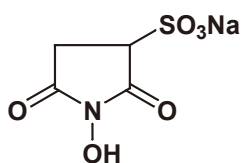
Y. 56%

Succinimide Derivatives

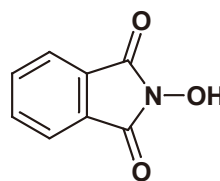
Succinimides are useful for the synthesis of isolable active esters.



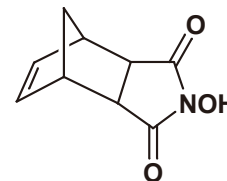
N-Hydroxysuccinimide (NHS)
25g / 100g / 500g
[H0623]



N-Hydroxysulfosuccinimide Sodium Salt (Sulfo-NHS)
200mg / 1g
[H1304]

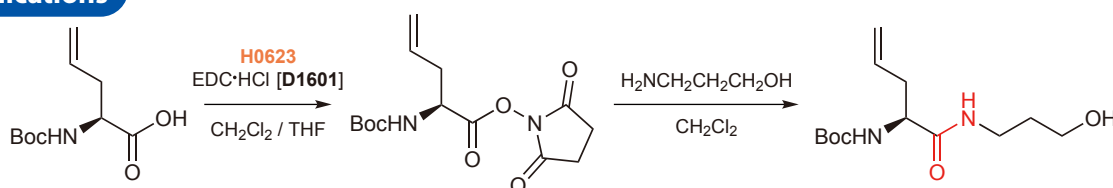


N-Hydroxyphthalimide (NHPI)
25g / 100g / 500g
[H0395]



N-Hydroxy-5-norbornene-2,3-dicarboximide
25g / 250g
[H0528]

Applications



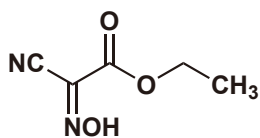
Y. 84% over two steps

T. Tanino, B. Al-Dabbagh, D. Mengin-Lecreulx, A. Bouhss, H. Oyama, S. Ichikawa, A. Matsuda, *J. Med. Chem.* **2011**, 54, 8421.

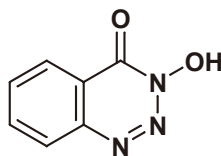
Additives for Condensation Reactions

Other Additives

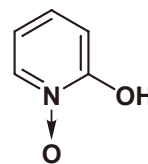
These products also can reduce the racemization in condensation reactions like triazole derivatives.



Ethyl Cyano(hydroxyimino)acetate (Oxyrna)
25g / 100g
[E0847]

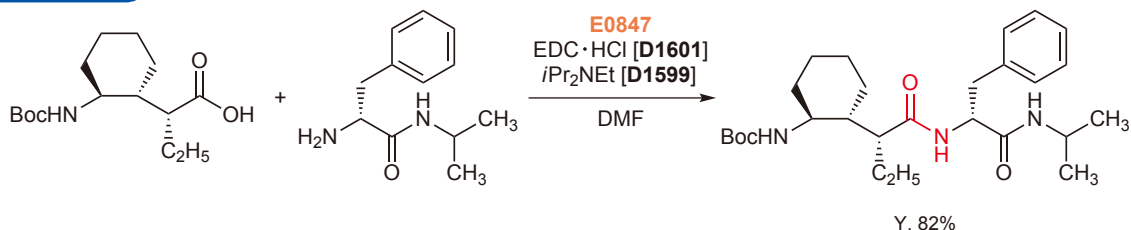


3,4-Dihydro-3-hydroxy-4-oxo-1,2,3-benzotriazine
10g / 25g
[D2039]

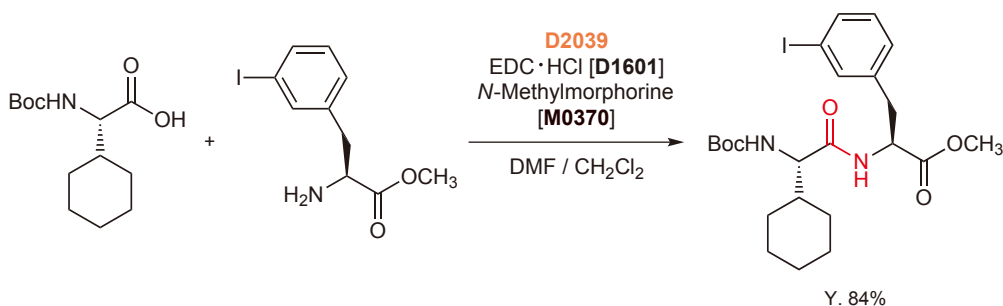


2-Hydroxypyridine N-Oxide
25g
[H0672]

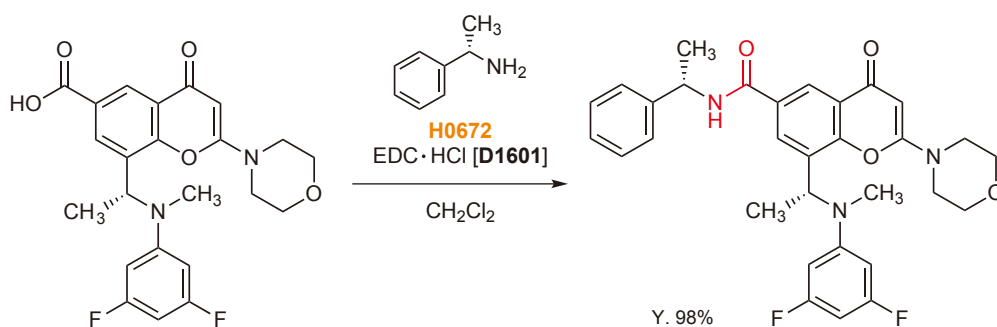
Applications



B. F. Fisher, L. Guo, B. S. Dolinar, I. A. Guzei, S. H. Gellman, *J. Am. Chem. Soc.* **2015**, *137*, 6484.



K. X. Chen, F. G. Njoroge, A. Prongay, J. Pichardo, V. Madison, V. Girijavallabhan, *Bioorg. Med. Chem. Lett.* **2005**, *15*, 4475.



B. Barlaam, *et al.*, *J. Med. Chem.* **2015**, *58*, 943.

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