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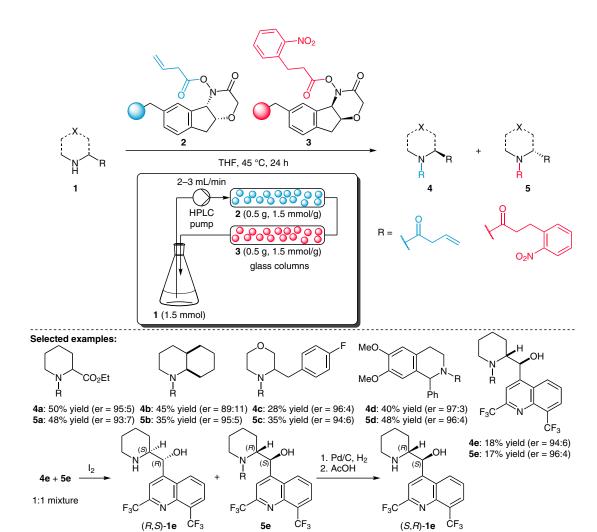
parallel kinetic resolution

polymer-supported reagents



Parallel Kinetic Resolution of N-Heterocycles by N-Acylations in Flow

Flow Chemistry and Polymer-Supported Pseudoenantiomeric Acylating Agents Enable Parallel Kinetic Resolution of



60% yield (er = 94:6)

Significance: A flow system for parallel kinetic resolution of N-heterocycles by using polymer-supported pseudoenantiomeric acylating agents was developed. A racemic mixture of heterocycles **1** was converted into the corresponding enantioenriched amides **4** and **5** in 17–50% yield by using a flow-reaction system with acylating agents **2** and **3** (0.5 mol equiv each).

90% yield (er = 97:3)

separated

SYNFACTS Contributors: Yasuhiro Uozumi, Takuma Sato Synfacts 2017, 13(08), 0877 Published online: 18.07.2017 **DOI:** 10.1055/s-0036-1590709; **Reg-No.:** Y09317SF

Comment: The resulting amides **4** and **5** were readily deprotected to give the corresponding free amines. Thus, for example, (*R*,*S*)- and (*S*,*R*)-mefloquine (**1e**) were obtained from a 1:1 mixture of amides **4e** and **5e** by selective deprotection without detectable epimerization (60–90% yield).

78% yield (er = 94:6)