Supporting Information

Synthesis of 2-Amino-5-Hydroxy-Caprolactam Derivatives Mediated by E-Selective Olefination and Asymmetric Oxidation of Enol Ether

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HPLC analysis of diastereomer ratio of 8s

HPLC analysis was conducted by a C18 column (5.0 μm, 4.6 × 250 mm) and detected at 210 nm using 70% MeOH in distilled water (1.0 ml/min).

mCPBA oxidation
(2S,5R)/(2S,5S) of 8s ~ 50/50

AD-mix-α oxidation
(2S,5R)/(2S,5S) of 8s ~ 20/80

AD-mix-β oxidation
(2S,5R)/(2S,5S) of 8s ~ 92/8
Shi asymmetric oxidation
(2S,5R)/(2S,5S) of 8S ~ 80/20