Key words (–)-epicoccin G

(-)-rostratin A

C(sp³)-H activation

dithiodiketo-

piperazines

asymmetric nucleophilic

epoxidation

Synthesis of (-)-Epicoccin G and (-)-Rostratin A

Efficient and Divergent Total Synthesis of (-)-Epicoccin G and (-)-Rostratin A Enabled by Double C(sp3)-H Activation

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J. Am. Chem. Soc. 2019, 141, 15779-15783.

Significance: (-)-Epicoccin G and (-)-rostratin A are members of the dithiodiketopiperazine family of natural products, whose members exhibit several biological activities, including in vitro anti-HIV-1 activity. The reported synthesis uses a C(sp³)-H activation to construct a common intermediate utilized in the synthesis of both natural products.

Comment: Asymmetric nucleophilic epoxidation of A followed by vinyl triflate formation afforded intermediate C. $C(sp^3)$ -H activation of F led to G, which was subsequently transformed into H, a common precursor for (-)-epicoccin G and (-)-ros-

Further insights can also be found in this issue: Synfacts 2019, 15, 1423.

SYNFACTS Contributors: Erick M. Carreira, Moritz J. Classen Synfacts 2019, 15(12), 1341 Published online: 18.11.2019 DOI: 10.1055/s-0039-1691075; Reg-No.: C06919SF