Highly Stereoselective Synthesis of Aristeromycin through Dihydroxylation of 4-Aryl-1-azido-2-cyclopentenenes

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1. General InformationS2
2. ¹H NMR spectra for compounds
 6a–c, 7a–c, 11, 12, 15, 16, and 2S3–S13

General Information. Infrared (IR) spectra are reported in wave numbers (cm^{-1}). The ^1H NMR (300 MHz) and ^{13}C NMR (75 MHz) spectra were measured in CDCl_3 using SiMe_4 ($\delta = 0$ ppm) and the center line of CDCl_3 triplet ($\delta = 77.1$ ppm) as internal standards, respectively. Racemic acetate **9**,^{1a,b} (1*R*,3*S*)-**9**^{1c,d} ($[\alpha]_{\text{D}}^{20} = +75$ (*c* 1.02, CHCl_3)) of > 95% ee (checked by the MTPA method), and cyclopentenols **10b**² and **10c**² were prepared according to the procedures. Routinely, organic extracts were dried over MgSO_4 and concentrated by using a rotary evaporator to afford residues, which were purified by chromatography on silica gel. Caution: OsO_4 used for the dihydroxylation of cyclopentenenes **6a–c** is a highly toxic reagent.

References

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6a

300 MHz, CDCl₃

300 MHz, CDCl_3

300 MHz, CDCl₃

7a

300 MHz, CDCl₃

7b

300 MHz, CDCl₃ + D₂O

300 MHz, CDCl₃ + D₂O

11

300 MHz, CDCl₃

12

300 MHz, CDCl₃

15

300 MHz, CDCl₃

16

300 MHz, CDCl₃

2

300 MHz, CDCl₃