

TOTAL SYNTHESIS OF (±)-SARUBICIN A (U-58,431)

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The first total synthesis of sarubicin A (antibiotic U-58,431) (**1**), which involves an efficient and stereoselective construction of the oxabicyclic ring system, has been achieved.

The suitably functionalized bromotetralone (**5**) derived from the succinylbenzene (**2**) was converted into the methylcarbinol (**7**) via the allyl alcohol (**6**). The cyano octalin derivative (**8**) prepared from **7** was subjected to catalytic osmylation to give the triol (**9**) stereoselectively. O-Trimethylsilylation of **9** followed by bromination with NBS and then dehydrobromination with AgClO_4 afforded the oxabicyclic compound (**11**) in excellent yield. The carboxamide (**12**) obtained from **11** was selectively demethylated with MeSLi/DMF to produce the monomethyl ether (**13**), which was treated with CAN and NH_3 to give the target molecule (**1**) in high yield.

