

TOTAL SYNTHESIS OF POLYETHER ANTIBIOTICS
(SALINOMYCIN AND ISO-LASALOCID-A)

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In connection with our interest in the total synthesis of polyether and macro-
-lide antibiotics, we have recently initiated synthetic studies on salinomycin
and iso-lasalocid-A from D-glucose as a chiral starting material and report here
some successful results.

For salinomycin, the synthesis of the C₁-C₉ fragment 1, C₁₀-C₁₇ fragment 2 and
C₂₁-C₂₉ fragment 3 except for the bisspiroketal ring system involving C₁₈-C₂₀
allyl alcohol part have been achieved.

For iso-lasalocid-A, we synthesized the C₁₃-C₁₇ fragment 5 and C₁₈-C₂₄ fragment
6 of iso-lasalocid ketone 4, which was derived from natural iso-lasalocid-A.
Coupling of 5 and 6 is now in progress.

