







Epimerization of C-22 in (25*R*)- and (25*S*)-sapogenins

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Highlights

- The formation of 22-*epi*-sapogenins from natural sapogenins and pseudosapogenins is described.
- The 22-*epi*-sarsasapogenin and 22-*epi*-yamogenin were obtained in good yield.
- An efficient route to obtain C-22 stereoisomers of 23-acetyldiosgenin is reported.
- The structures of 22-*epi*-sapogenins were established by NMR studies.

Abstract

Most of the naturally occurring steroidal sapogenins (C-23 non-substituted frameworks), possess an *R* configuration at the spiro C-22 center. Their C-22 epimers have become important targets in biological research. This paper describes a procedure to obtain 22*S*-spirostans from 22*R*-sapogenins and pseudosapogenin skeletons, without affecting the chirality at either C-25 or C-20. An optimal way to