

ABSTRACT

PROCESS FOR THE SYNTHESIS OF AZETIDINONES

A process is provided for preparing azetidinones useful as intermediates in the synthesis of penems and as hypocholesterolemic agents, comprising reacting a β -(substituted-amino)amide, a β -(substituted-amino)acid ester, or a β -(substituted-amino)thiolcarbonic acid ester with a silylating agent and a cyclizing agent selected from the group consisting of alkali metal carboxylates, quaternary ammonium carboxylates, quaternary ammonium hydroxides, quaternary ammonium alkoxides, quaternary ammonium aryloxides and hydrates thereof, or the reaction product of: (i) at least one quaternary ammonium halide and at least one alkali metal carboxylate; or (ii) at least one quaternary ammonium chloride, quaternary ammonium bromide, or quaternary ammonium iodide and at least one alkali metal fluoride, wherein a quaternary ammonium moiety of the cyclizing agent is unsubstituted or substituted by one to four groups independently selected from the group consisting of alkyl, arylalkyl and arylalkyl-alkyl.

-No Figure-