

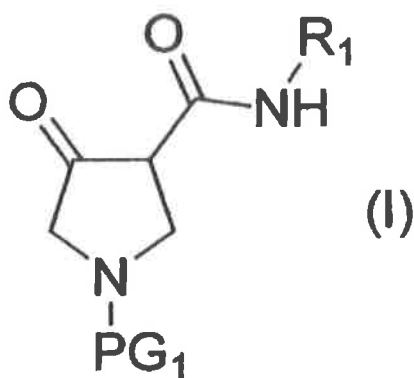
METHOD FOR PRODUCING 3,4-DISUBSTITUTED PYRROLIDINE DERIVATIVE

Abstract

The present invention provides an inexpensive and industrially advantageous method for producing an optically active form of an anti-(3S,4R)-3-alkylcarbamoyl-4-hydroxypyrrolidine derivative or its enantiomer, which is a key intermediate for producing a high-quality optically active form of (3R,4S)-3-alkylaminomethyl-4-fluoropyrrolidine or its enantiomer useful as an intermediate for producing pharmaceuticals.

The present invention relates to a method for producing an optically active anti-(3S,4R)-4-hydroxypyrrolidine-3-carboxamide derivative, or its enantiomer by carrying out asymmetric hydrogenation using an optically active catalyst of a 4-oxopyrrolidine-3-carboxamide derivative represented by the general formula (I).

[Chem. 1]



[in the formula (I), PG¹ represents a protective group for an amino group, and R¹ represents hydrogen, a C1 to C6 alkyl group which may be substituted, or a C3 to C8 cycloalkyl group which may be substituted].