

ABSTRACT

The present invention provides a method enabling convenient production of an optically active secondary alcohol useful as a pharmaceutical intermediate, particularly an
5 optically active 1,2-diol and an optically active 2-alkanol, from an enantiomer mixture thereof.

An oxidizing enzyme source having the capability of selectively oxidizing one enantiomer of secondary alcohol is allowed to act on an enantiomer mixture of secondary alcohol in
10 the presence of a reducing enzyme source having the capability of reverse enantio-selectively reducing a ketone derivative, to convert the enantiomer mixture into a substantially single enantiomer at a theoretical percent recovery of 100%, whereby an optically active secondary alcohol is produced.