ABSTRACT

The present invention has an object to provide a method for separating and purifying a PHA without causing a serious decrease of the molecular weight to obtain a highly pure PHA in a high yield, which comprises efficiently removing cell components other than PHA particles from a cultured PHA-containing microbial cell. Another object of the present invention is to provide a method for obtaining an agglomerate of PHA particles.

The method for recovering a PHA according to the present invention is a method which comprises efficiently disrupting a cell to recover the PHA by carrying out a physical disruption treatment and an alkali addition at low temperature for an aqueous suspension of the PHA-containing microbial cell, and then treating the PHA with an enzyme and/or a surfactant. Moreover, the particle diameter of the PHA may be enlarged by suspending the PHA in a hydrophilic solvent and/or water, and stirring at a temperature equal to or below the boiling point of said suspension, to agglomerate said PHA.