

Abstract

[Object] To provide a method for isolating and purifying a minute useful substance. [Solution] Disclosed is a method for isolating and purifying a minute useful substance. The method includes filtering a liquid containing a minute useful substance through a hollow fiber membrane. The hollow fiber membrane has an inner diameter of 0.2 mm to 1.4 mm and a molecular weight cut-off of 100000 to 1000000. The filtering includes a first filtration process of press-fitting the liquid containing the minute useful substance from a first opening on one end side of the hollow fiber membrane and filtering the liquid to separate the liquid into a permeate and a first concentrate, and a second filtration process of press-fitting the first concentrate from a second opening on the other end side of the hollow fiber membrane and filtering the first concentrate to separate the first concentrate into a permeate and a second concentrate. A concentrate is produced in which a concentration of the minute useful substance is increased by filtration in which the first filtration process and the second filtration process are alternately performed a plurality of times at a membrane surface velocity of 0.3 m/sec to 2 m/sec.