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(54) Title: METHOD OF PREPARING LYSOZYME DIMERS

(57) Abstract

A method is provided for preparing a highly purified lysozyme dimer product which comprises dimerizing the lysozyme monomer with a suberimidate coupling reagent in a buffer solution adjusted to pH 10, stopping the dimerization at a given point by lowering the pH to 7 via addition of HCl or other suitable acid solution, and purifying the dimeric lysozyme by a series of elution steps carried out using ion exchange resin column chromatography. Monomeric lysozyme remaining undimerized by the initial dimerization step is recycled into the process in order to increase yield. The present system is advantageous in that large amounts of purified lysozyme dimer can be prepared efficiently and relatively inexpensively, and the lysozyme dimer so produced is useful in treating viral and/or bacterial diseases without causing the cytotoxic effects associated with the lysozyme monomer.

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