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(54) Title: PROCESS FOR SEPARATING ALPHA-1-PROTEINASE INHIBITOR FROM COHN FRACTION IV_1 +IV_4 PASTE

(57) Abstract

The present invention is directed to a process for purifying alpha-1-PI. The process comprises providing an impure protein fraction which comprises alpha-1-PI. The impure protein fraction is suspended in an aqueous solution at pH 6. Insoluble proteins are recovered and resuspended in aqueous solution at pH 8,5. PEG is added to precipitate α-2 proteins. To the PEG supernatant precipitation, which comprises alpha-1-PI, is added $ZnCl_2$ to precipitate crude alpha-1-PI. The crude alpha-1-PI is resolubilized and apllied to an anion-exchange medium. A fraction comprising alpha-1-PI is recovered from the anion-exchange medium. Alpha-1-PI purified by the process has a specific activity about 1.0 units/OD_{280}.