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(54) Title: PROCESS FOR THE PREPARATION OF PEPTIDES

(57) Abstract: The present invention relates to an improved process for the preparation of N6-(aminoiminomethyl)-N2-(3-mercapto-1-oxopropyl-L-lysylglycyl-L- -aspartyl-L-tryptophyl-L-prolyl-L-cysteinamide, cyclic(1 6)-disulfide of formula (1), which involves assembling amino acid residues and a thioalkyl carboxylic acid with appropriate protecting groups on a solid phase resin, cleaving the peptide thus obtained from the resin with concomitant removal of side chain protecting groups except Acm protecting group of thiol moiety to obtain peptide amide of formula(3), converting lysine residue of peptide amide of formula(3) having protected thiol group to homoarginine residue by guanylation to obtain peptide amide of formula(4), preparation of silver peptide of formula(5), followed by simultaneous deprotection and oxidation of the said silver peptide to obtain crude peptide amide comprising compound of formula(1) and finally subjecting to chromatographic purification. The described process is simple, easy, environment friendly and cost effective.

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