综述

环状氨基酸的合成及其应用

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摘要 环状氨基酸是一种构型限制型氨基酸,因为它们的构象限制性特点有利于肽的生物活性构象的形成和稳定,在修饰多肽时引起的构象效应和生物学效应有着重要的理论和应用价值,常用于修饰生物活性肽,以改善其药学性质。研究表明,环状氨基酸的引入是一种改善多肽性质的有效方法之一。本文就环状氨基酸的结构特点、合成,尤其是多肽修饰方面进行了综述。

关键词 环状氨基酸 构象限制 合成 生物活性肽

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Synthesis and applications of cyclic amino acids

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Abstract

Cyclic amino acids were often applied to the modification of bioactive peptides, because their conformational-restriction properties were helpful for forming and stabilizing the bioactive conformations of peptides. 【JP3 】 They were often used in modifying peptides to produce conformational and biological effects, which played a very important role in theoretical and applied research. Thus, they were used to modify bioactive peptides to improve their pharmaceutical properties, and the introduction of cyclic amino acids to peptides was one of the effective approaches to improve the properties of peptides. Here a brief review about their structural properties, synthesis, and especially their applications in peptide modification is presented.

Key words cyclic amino acids conformational restriction synthesis bioactive peptide

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