

食品一研究报告

燕窝蛋白质样品制备方法的比较及其双向电泳分析

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摘要:

燕窝水提及丙酮沉淀蛋白质经液相等电聚焦电泳纯化后, 再经双向电泳分离获得了质量较佳的2-DE图谱, 由此可见液相等电聚焦电泳是对燕窝蛋白质进行纯化的有效手段。对纯化后的2个白燕窝和1个血燕窝水提及丙酮沉淀蛋白质进行了双向电泳分析, 结果显示两种方法制备蛋白质获得的2-DE图谱非常相似。燕窝水提蛋白质经丙酮沉淀制备样品时间较透析、冻干所需的时间短, 这对于成分更为复杂且蛋白质提取率较低的血燕窝则更为适用。

关键词: 双向电泳

Comparison of Protein Preparation and Two Dimensional Electrophoresis Analysis from Edible Bird's Nest

Abstract:

Protein samples, prepared with water extraction or acetone precipitation, were both well separated by two-dimensional electrophoresis (2-DE) after purification with liquid-phase isoelectric focusing (LIEF). So LIEF was an effective purification method for edible birds' nest (EBNs). With different preparation methods, similar 2-D gel protein profiles were obtained in two white EBNs and one blood EBN. While compared to dialyzation and lyophilization, the time of sample preparation with acetone precipitation was greatly reduced. Consequently, protein precipitated with acetone prior to LIEF was more applicable to blood EBNs for their low protein extraction rate.

Keywords: two-dimensional electrophoresis (2-DE)

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