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[1] 穆筱梅, 钟振声, 杨梅. 脂质体用大豆卵磷脂的制备及质量评价[J]. 大豆科学, 2007, 26(02): 250-253. [doi:10.3969/j.issn.1000-9841.2007.02.027]

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脂质体用大豆卵磷脂的制备及质量评价

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关键词: 大豆卵磷脂 (KeySearch.aspx?type=Keyword&Sel=大豆卵磷脂); 溶剂萃取 (KeySearch.aspx?type=Keyword&Sel=溶剂萃取); 超临界CO₂萃取 (KeySearch.aspx?type=Keyword&Sel=超临界CO₂萃取); 脂质体 (KeySearch.aspx?type=Keyword&Sel=脂质体)

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摘要: 以大豆磷脂为原料, 用溶剂-超临界CO₂萃取法制各脂质体用高纯度大豆卵磷脂, 并对其质量进行评价。结果表明大豆卵磷脂的含量是94.98%, 丙酮不溶物的含量是99.0%, 酸值是20.6 KOH mg/g, 干燥失重是0.63%, 己烷不溶物的含量0.18%, 砷盐的含量是2.1×10⁻⁶%, 重金属的含量是2.0×10⁻⁵%。以精制的大豆磷脂为原料制备的脂质体, 在透射电镜下呈圆球状。粒径为164 nm, Zeta电位为-28.50 mv, 包封率是32.43%。

Abstract: High-purity soybean phosphatidylcholines (SPC) as liposomal material was prepared from soybean phospholipids with a method combined super critical carbon dioxide extraction and solvent extraction. The results of the quality evaluation showed that the SPC was separated with 94.98% purity, the content of acetone-insoluble matter, hexane-insoluble matter, heavy metals and arsenic were respectively 99%, 0.18%, 2.0×10⁻⁵% and 2.1×10⁻⁶%, the acid value was 20.6 mg of potassium hydroxide, loss on drying of SPC was 0.63%. The liposome made with SPC showed spherical shape, its main particles was 164 nm, Zeta potential was -28.50 mv, and the entrapment efficiency was 32.43%.

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