

研究简报

## 染料壳聚糖微球的制备及其对人血清白蛋白吸附性能研究

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摘要

关键词 [壳聚糖](#) [Cibacron Blue F3GA](#) [染料亲和吸附剂](#) [HAS](#)

分类号

### THE PREPARATION OF CIBACRON BLUE F3GA ATTACHED CHITOSAN MICROSPHERES AND THEIR ADSORPTION PROPERTIES FOR HUMAN SERUM ALBUMIN

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**Abstract** A series of aminated chitosan microspheres were prepared from chitosan, and then an affinity dye—ligand, Cibacron Blue F3GA, was covalently coupled. The maximum attachment of cibacron blue F3GA was 494  $\mu\text{mol} / \text{g}$ . Albumin adsorption onto cibacron blue F3GA—attached chitosan microspheres was investigated. The human serum albumin(HSA) equilibrium adsorption capacity was 79.8  $\text{mg} / \text{s}(\text{wet beads})$ . The adsorption equilibrium isotherms appeared to follow a typical Langmuir isotherm. The highest desorption ratio(100%) was achieved by using an eluent of 1.0  $\text{mol} / \text{L}$  NaSCN(pH 8.0). The cibacron blue F3GA-attached chitosan microspheres could be reused without significant decreases in the adsorption capacities.

**Key words** [Chitosan](#) [Cibacron blue F3GA](#) [Dye-affinity sorbent](#) [HSA](#)

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