

技术与方法

三步法制备级纯化抗CD20 (Fab')₂

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摘要 摘要: 目的 在小规模蛋白纯化系统AKTA prime上建立制备级纯化抗CD20 (Fab')₂的方法。方法 将通过高渗溶液提取的周质腔蛋白抗CD20 (Fab')₂依次经过离子柱、疏水柱和亲和柱纯化, 采用蛋白电泳和高效液相色谱法分析检测其分离效果及纯度, 同时测定其与Raji细胞的结合活性。结果 在该纯化条件下一次可获得8mg纯度为96.678% 的抗CD20 (Fab')₂, 其与CD20+Raji细胞的结合活性与采用亲和柱联合分子筛柱得到的抗体活性基本一致。结论 三步法制备级纯化抗CD20 (Fab')₂操作简单, 能获得制备级高纯度抗CD20 (Fab')₂。

关键词 [抗CD20 \(Fab'\)₂](#); [三步法纯化](#); [高效液相色谱分析](#)

分类号

Three-step Purification of Preparative-scale AntiCD20 (Fab')₂

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Abstract ABSTRACT: Objective To establish a three-step purification method of preparative-scale antiCD20 (Fab')₂ using AKTA prime. Methods AntiCD20 (Fab')₂ was extracted by hyperosmotic solution and then purified by CM sepharose FF, phenyl sepharose FF, and protein G sepharose FF. Results Around 8 mg anti-CD20 (Fab')₂, whose purification was 96.678%, was purified. The antigen-binding activity of antiCD20 (Fab')₂ was similar to that of antiCD20 (Fab')₂ purified by protein G sepharose FF and S-100. Conclusion The three-step purification method can obtain high-purity preparative-scale antiCD20 (Fab')₂ in a simple way.

Key words [antiCD20 \(Fab'\)₂](#); [three-step purification](#); [high-performance liquid chromatograph](#)

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