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多价半乳糖配体的设计及其对肝去唾液酸糖蛋白受体结合的研究

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收稿日期 2005-11-16 修回日期 2006-4-1 网络版发布日期 2006-8-29 接受日期

摘要 为了找到对肝去唾液酸糖蛋白受体ASGPR具有良好结合力的配体, 我们设计并合成了四种不同骨架的半乳糖簇,

并且对这些化合物与ASGPR的结合通过体外实验进行了分析。结果表明,

三价半乳糖簇与ASGPR的结合力强于对应的二价半乳糖簇,

骨架中含苯环的半乳糖簇与ASGPR的结合力强于脂肪链骨架的半乳糖簇。

关键词 [糖簇](#), [芳基](#), [簇集效应](#), [结合力](#), [憎水基](#)

分类号

Design of Multivalent Galactoside Ligands and Their Binding to Hepatic Asialoglycoprotein Receptor

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Abstract In an effort to find highly efficient ligands for hepatic asialoglycoprotein receptor (ASGPR), four cluster galactosides with different scaffolds were synthesized in this paper. The affinity of these compounds for ASGPR was analyzed by binding study *in vitro*. The results showed that trivalent cluster galactosides behaved better than divalent analogues and the cluster galactosides with aryl groups on their scaffolds presented better binding affinity than those with aliphatic chain scaffolds.

Key words [cluster galactoside](#) [aryl group](#) [cluster effect](#) [binding affinity](#) [hydrophobic group](#)

DOI:

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