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[1]彭游,喻国贞,郎少杰,等.新型大豆异黄酮萘磺酸酯前药的设计合成[J].大豆科学,2013,32(06):854-857.  
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 PENG You, YU Guo-zhen, LANG Shao-jie, et al. Design and Synthesis of Novel Genistein Naphthylsulfonate Prodrugs [J]. Soybean Science, 2013, 32(06):854-857. [doi:10.11861/j.issn.1000-9841.2013.06.0854]

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## 新型大豆异黄酮萘磺酸酯前药的设计合成

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**Title:** Design and Synthesis of Novel Genistein Naphthylsulfonate Prodrugs  
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**摘要:** ?利用前药原理对大豆异黄酮染料木素进行化学修饰,以提高染料木素的生物利用度进而改善其生物活性。结果成功设计合成了4个新型染料木素萘磺酸酯衍生物(2~5),所有新化合物的结构均经IR、MS、元素分析和<sup>1</sup>H NMR确证。采用平行实验优选法优化关键中间体2的合成,并对其烷基化反应化学进行了初步分析。  
**Abstract:** ?To improve bioavailability and biological activity of genistein, we designed and synthesized the new soy isoflavone genistein derivatives(2-5) according to principles of prodrugs. Their structures were characterized by IR, MS, elemental analysis and <sup>1</sup>H NMR spectra. Synthesis of the key intermediate 2 was optimized by parallel experimental optimization method, and its alkylation reaction chemistry was analyzed preliminarily.

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