

质子酸催化磺酰胺类化合物的 N-烷基化反应

石巍¹, 原东鹏¹, 柏春美¹, 崔冬梅^{1*}, 张辰^{2*}

¹ 浙江工业大学药学院, 浙江杭州, 310014

² 浙江大学药学院, 浙江杭州, 310058

*Email: cuidongmei@zjut.edu.cn

N-取代磺酰胺类化合物是一类重要的有机合成中间体, 具有多种生物活性, 在农药, 医药等方面都有着广泛的应用, 因此, 研究该类化合物的合成具有重要的理论意义及实用价值。^[1,2] 本文开发了以醚为烷基化试剂, 在质子酸催化下磺酰胺类化合物的N-烷基化反应。实验研究表明, 环醚、链醚在该反应中均可取得较好的收率。

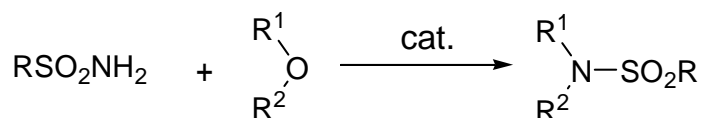


Fig. 1 N-alkylation reactions of sulfonamides

关键词：质子酸；N-烷基化；磺酰胺；醚

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Brønsted acid-assisted N-alkylation reactions of sulfonamides

Wei Shi¹, Dong-Peng Yuan¹, Chun-Mei Bai¹, Dong-Mei Cui^{1*}, Chen Zhang^{2*}

¹ College of Pharmaceutical Science, Zhejiang University of Technology, Hangzhou, China, 310014

² College of Pharmaceutical Science, Zhejiang University, Hangzhou, China, 310058

Alkyl amines are important functional groups in organic chemistry, and the development of preparation methods for these compounds is a challenging area of organic synthesis.^[1] In this context, N-alkylation reactions of sulfonamides have attracted significant attention, because the sulfonamide moiety is found in a large number of agrochemicals and pharmaceuticals.^[2] Herein, we report the N-alkylation of sulfonamides using ethers as alkyl sources under mild reaction conditions.