

寡肽Asterin B和C溶液构象的NMR研究 1: ^1H NMR归属及构象特征

高金海, 宋国强, 邵宇, 程东亮

中国科学院上海药物研究所; 兰州大学应用有机化学国家重点实验室

收稿日期 修回日期 网络版发布日期 接受日期

摘要 Asterin B和C是从紫菀中分得的两个寡肽, 本文利用2D-NMR技术归属了它们的 ^1H NMR谱线, 并讨论了它们的构象特征。为进一步采用NMR和分子动力学(MD)方法研究它们的溶液构象奠定了基础。

关键词 [寡肽](#) [质子磁共振谱法](#) [紫菀](#) [分子动力学](#) [溶液构象](#) [二维核磁共振](#)

分类号 [0629](#)

Conformational studies of asterin B and C in solution by NMR

GAO JINHAI, SONG GUOQIANG, SHAO YU, CHENG DONGLIANG

Abstract Several 2D NMR techniques have been used to assign all proton resonances of Asterin B and C, which were biologically active peptides isolated from Aster tataricus. Recognition of the amino acid spin systems has been achieved by COSY spectra, including two new residues (ΔPro and βPhe) in plant peptide. The sequential assignments were obtained based on the combination of COSY and NOESY spectra and confirmed the amino acid sequence in both peptides. These assignments provide an essential foundation for elucidation of their solution conformations based on NMR data and restrained MD simulations.

Key words [OLIGOPEPTIDE](#) [PROTON MAGNETIC RESONANCE SPECTROMETRY](#) [ASTER TATARICUS](#) [MOLECULAR DYNAMICS](#)

DOI:

通讯作者

扩展功能

本文信息

- ▶ [Supporting info](#)
- ▶ [PDF\(460KB\)](#)
- ▶ [\[HTML全文\]\(0KB\)](#)
- ▶ [参考文献](#)

服务与反馈

- ▶ [把本文推荐给朋友](#)
- ▶ [加入我的书架](#)
- ▶ [加入引用管理器](#)
- ▶ [复制索引](#)
- ▶ [Email Alert](#)
- ▶ [文章反馈](#)
- ▶ [浏览反馈信息](#)

相关信息

- ▶ [本刊中 包含“寡肽”的 相关文章](#)
- ▶ 本文作者相关文章

- [高金海](#)
- [宋国强](#)
- [邵宇](#)
- [程东亮](#)