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基础研究和新技术

利用冷喷雾质谱考察溶剂表面张力对蛋白质电荷价态分布的影响

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摘要

关键词

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Effect of Solvent Surface Tension on the Protein Charge State Distributions by Coldspray Ionization Mass Spectrometry

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Abstract Coldspray ionization mass spectrometry(CSI-MS) was employed to investigate the influence of solvent surface tension on protein charge-state distributions(CSD). The CSI-MS spectra of three model proteins were obtained in aqueous solutions, containing acetic acid, formic acid and hydrochloric acid, with different solvent surface tension. None of these solvents affects the CSDs of folded proteins as predicted by the Rayleigh-charge model. The protein CSDs in CSI-MS spectra did not seem to be limited by the solvent surface tension.

Key words protein charge-state distribution _ coldspray ionization mass spectrometry _ solvent surface tension

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