

||||| 特集：蛋白質宇宙実験の最近の動きと今後の展望 |||||
(原著論文)

タンパク質結晶成長により形成される不純物分布の可視化

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Visualization of Impurity Distribution Formed by Protein Crystal Growth

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Abstract

In order to verify the impurity depletion zone hypothesis, we developed a new method, which employs a confocal laser scanning microscope for detecting fluorescence of the labeled impurity. This method is capable of visualizing the impurity distribution both inside and surroundings of the crystal. We visualized both the impurity depletion zone around the growing protein crystal, and also the impurity distribution inside the crystal. The impurity distribution inside the crystal revealed that the impurity distribution coefficient in this experiment condition was about 1.