hNck2 SH3 domain のフォールディング過程 Folding of hNck2 SH3 domain

Yoshitaka Matsumura¹, Masaji Shinjo¹ Kaoru Ichimura¹ Jianxing Song², Hiroshi Kihara¹

¹Department of Physics, Kansai Medical University, ²Department of Biochemistry, Yong Loo Lin School of Medicine and Department of Biological Sciences, National University of Singapore

We have reported folding processes of SH3 domain proteins, such as, .src SH3 domain, its mutant, A45G, Fyn SH3 domain mutants and PI3K SH3 domain. These SH3 domains took compact kinetic transient α -helix-rich intermediate before formed the native β -structure on their folding pathway.

We have started study of another SH3 domain, hNck2 SH3 domain. It is known that this protein takes equilibrium α -helix-rich intermediate at acidic pH conditions. We expected that there will be observed α -helical burst on this β -protein folding pathway by kinetic stopped-flow combined with circular dichroism experiments, too. However, in the kinetic refolding experiments, there was no burst phase. We will discuss and consider the results at the poster.