

Poster Presentation

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Structural characterization of Get3/Get4/Get5 involved in TA-protein targeting

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During the biosynthesis of tail-anchored (TA) membrane proteins, their single C-terminal trans-membrane segment is inserted into the ER membrane for orientating the functional domain(s) towards the cytosolic side of the cell. The machinery responsible for this post-translational process has only recently come to light. In yeast, the proteins participating in TA protein insertion include Get1/Get2, Get3, Get4 and Get5. Although structural information and the individual roles of most components of this system have been defined, the interactions and interplay between them remain to be elucidated. Here, we investigated the interactions between Get3 and the Get4/Get5 complex (Get4/5) from *Saccharomyces cerevisiae*. We show that Get3 interacts with Get4/5 via an interface dominated by electrostatic forces. Using isothermal titration calorimetry and small-angle X-ray scattering, we further demonstrate that the Get3 homodimer interacts with two copies of the Get4/5 complex to form an extended conformation in solution.

[1] Chang, Y.-W., Lin, T.-W., Li, Y.-C., Huang, Y.-S., Sun, Y.-J. & Hsiao, C.-D.* (2012) *J. Biol. Chem.* 287, 4783-4789.

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