Binding of FKBP23 to BiP in ER Shown by Gel Filtration Chromatography

Chen Chen[a], Hui Ma[a], Ying Wang[a], and Huaifeng Mi[a,b,*]

[a] Biochemical Section of Key Laboratory of Functional Polymer Materials, Ministry of Education of China, Institute of Polymer Chemistry, Nankai University, 300071 Tianjin, China. Fax: (+86) 22 23 50 27 49. E-mail: hfmi@nankai.edu.cn
[b] Medical School of Nankai University, 300071 Tianjin, China

* Author for correspondence and reprint requests

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FKBP23 was found in mouse endoplasmic reticulum (ER) in 1998. It consists of an *N*-terminal peptidyl-prolyl *cis/trans* isomerase (PPIase) domain and a *C*-terminal domain with Ca^{2+} binding sites. Previously, we reported that FKBP23 specifically binds to BiP, the main protein of the molecular chaperone Hsp70 in ER lumen, and the binding is interrelated with the Ca^{2+} concentration. In this work we have found the existence of the complex FKBP23/BiP by separation of an ER extract using gel filtration chromatography (GFC), and that the existence of this complex is Ca^{2+}-interrelated. This result further verified the Ca^{2+}-interrelated binding of these two proteins *in vivo*.

Key words: FKBP23, BiP, Gel Filtration Chromatography