

1-8. Structure Analysis of the Full Length PDI Genomic DNA Isolated from *Bombyx mori*

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Protein disulfide isomerase (PDI) is not only an isomerase catalyzing the formation of native disulfide bond(s) of nascent peptide, but also a molecular chaperone assisting chain folding. We have already reported the structure of a cDNA (bPDI) encoding PDI from *Bombyx mori* and the function of PDI as foldase in assisting protein folding. To investigate the function of PDI as molecular chaperone, we cloned the PDI genomic DNA from *Bombyx mori*, and then analyzed whether the promoter region of PDI genomic DNA contains the cis-acting unfolded protein response element (UPRE) which has been thought to be recognized by Hac1p or ATF6 transcription factor.

The PDI genomic DNA is about 30.2 kb in length and contains the UPRE sequence that is necessary for activation of molecular chaperone. As the above results, we suggest that the PDI have both foldase and chaperone activities.