

## Characterization of putative telomere sequence binding proteins of *Candida* species

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Telomere, the chromosomal end structure, consists of many repeated sequence units in tandem. To understand the mechanism of telomere maintenance, which is poorly known, first, telomere binding proteins based on the structure of telomere has been studied. Therefore, telomere binding proteins have been attempted to isolate from two species of *Candida* such as *C. albicans* and *C. glabrata*. Using single stranded G-rich or C-rich telomeric DNA, CaBP's (G-rich single stranded telomere binding proteins from *C. albicans*) or CgRBP's (unusual C-rich single stranded telomere binding proteins from *C. glabrata*) were screened, respectively. All CaBP's had similar characteristics as DNA binding proteins although CaBP's I and IV showed RNase sensitivity. Therefore, CaBP's I and IV may be closely related with telomerase.

The function of putative proteins, CgRBP's, was proposed that they might be involved with telomere end structure. According to the recent reports, the C-rich telomere could form a specific structure at chromosome end although the function of that structure was not studied. I expect that this study about the telomere binding protein may provide a ground for structural and functional studies of telomere. The screening of novel protein like CgRBPs in other species might support the elucidation of mechanism of telomere structure and maintenance.