List of Tables

| Chapter 2: Cloning, Purification and Structural Characterization | of |
|---|-----------|
| Four Domains of Ubiquitin Activating Enzyme E1 | |
| Table 2.1. Primer sequences used to amplify domains of E1 | 51 |
| Table 2.2. Values of the secondary structure obtained from CD spectra | |
| analysis done by Bestsel and secondary structure prediction | |
| software PSIPRED shown in percentages | 69 |
| Chapter 3: Cloning and Functional Characterization of Four | |
| Domains of Ubiquitin Activating Enzyme E1 | |
| Table 3.1. Primer sequences used to clone domains of E1 in Yep96 | |
| vector | 83 |
| Table 3.2. Determination of doubling time of MHY501 cells | |
| transformed with domains 4HB, FCCH, SCCH, UFD in absence | |
| and presence of inducer CuSO ₄ . | 92 |
| Chapter 4: Structural and Functional Studies on β-bulge Mutan | <u>ts</u> |
| of Ubiquitin | |
| Table 4.1. Percentage frequencies of occurrence of amino acids at | |
| first, second and X-position of β -bulge (Chan et al., 1993). | 99 |
| Table 4.2. Components of Ubiquitin Activation by E1 Assay | 106 |
| Table 4.3. Buffer composition used to check the effect of different pHs | |
| on ubiquitin β -bulge mutants. (Buffers were prepared and | |
| adjusted to required pH). | 108 |