



Figure 6.2 Schematic representation of the structural fold of β -lactamase TEM-1 consisting of three domains (a). The dotted line indicates the active site with catalytic S70. The presented scheme corresponds to the location of domains in the tertiary structure of β -lactamase TEM-1 (PDB ID 1ERO (Ness et al. 2000)) (b). The locations of the catalytic S70, H2 α -helix, S3 β -strand, and the Ω -loop are highlighted. (See insert for color representation of the figure.)

6.2.1 Catalytic Site of β -Lactamase TEM-1

The β -lactamase active site is located between H2 α -helix and S3 β -strand. Catalytically important residues are located in the conservative regions of these α -helix (S70, K73) and β -strand (K234, A237), as well as on the elements