

Abstract

One part of my work was focused on literature review within the conformational changes of cytochrome c under various circumstances. Main goal of these studies is to clarify the importance of conformational changes of cytochrome c as the cell death messenger. Cytochrome c binds to cardiolipin-rich inner mitochondrial membrane and a molten globule-like intermediate is supposed to play still unknown role in cell death start. Cytochrom c is also common model protein in a „simple” protein folding problem. It is simple, small molecule and easy to obtain protein that can be studied by a broad variety of techniques. The second part of my work presents conformational study of horse heart ferricytochrome c under acidic conditions with addition of inorganic salts. These conformational changes were monitored using UV/VIS spectrophotometry in four areas of absorption spectrum - aromatic amino acids absorption area and so called Soret band, Q-band and CT band. Derivative of these spectra were used in order to obtain higher-resolution informations.