Current Topics in Biophysics (Zagadnienia Biofizyki Współczesnej) vol. 20 (supplement), 1996, 107-111

Catalase-mediated semiquinone and chromanoxyl radicals formation: direct observation of their synergistic interactions or decay at room temperature

Diana Metodiewa, Lidia Gębicka, Janusz Bednarek

The catalase peroxidatic action towards model substrate system (catecholamine, Trolox C or ascorbate) has been studied. The first ESR evidence for one-electron oxidation of investigated substances mediated by catalase is reported. The repair reaction of catalase-generated semiquinone or chromanoxyl radical by ascorbate or SH-antioxidants has been shown.