Abstract

From the hemolytic activity assay, it is observed that Y87ATDH and Y87F TDH lose their functional activities, while WT TDH shows 100 % hemolysis of RBCs. From far UV spectra, and intrinsic tryptophan fluorescence spectra, it is observed that Y87F TDH maintained structural integrity, while there is deviation in Y87A TDH as that of WT TDH. Y87F TDH shows similar binding as that of WT TDH with PC liposome and RBCs. From the present results, it could not be concluded that Tyr87 in TDH is important in membrane binding. But, it is certain that Tyr87 in TDH is important in formation of a functional toxin as, both Y87A TDH and Y87F TDH lose their functional activity when checked with human erythrocytes.