

Abstract

The objective of this study was to determine the phenotypic distribution of paraoxonase activity in Thai population. The serum samples taken from 212 unrelated healthy Thai volunteers (128 male and 84 female) with the average age 24.8 ± 8.3 (range 17-51) years were collected for determining the activities of basal paraoxonase (P), salt-activated paraoxonase (SAP) and arylesterase (A) by using a spectrophotometer. The distribution of paraoxonase activity of this population showed trimodality, based upon the ratio of SAP to A activity at the antimodal 2.8 and 7.0, which indicated three distinct phenotypes : low (AA, 16.0%), intermediate (AB, 48.6%) and high (BB, 35.4%) activity. It was also demonstrated to fit to Hardy-Weinberg equilibrium ($\chi^2 = 0.019, p = 0.991$). Gene frequencies of PON*A and PON*B were 0.4033 and 0.5967, respectively.