

Supplementary Materials: The Application of a Modified d-ROMs Test for Measurement of Oxidative Stress and Oxidized High-Density Lipoprotein

Fumiaki Ito, Tomoyuki Ito, Chinatsu Suzuki, Tomoyo Yahata, Kazuyuki Ikeda and Kenji Hamaoka

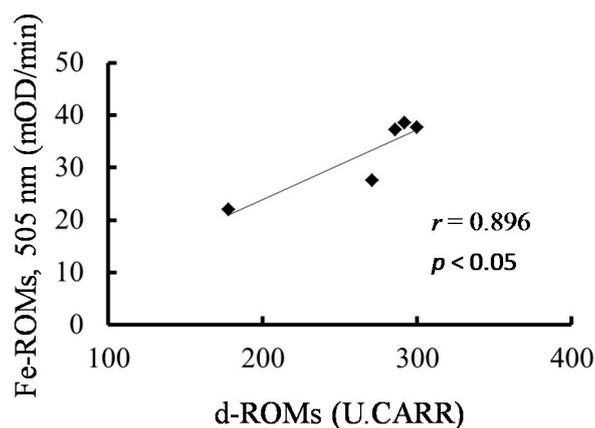


Figure S1. The correlation of Fe-ROMs values with diacron-reactive oxygen metabolites (d-ROMs) values. The oxidative stress was evaluated by measuring plasma samples from five healthy subjects. The rates of increase in absorbance at 505 nm were determined in the presence (Fe-ROMs test) and absence (d-ROMs test) of Fe^{2+} , as described in the Materials and Methods. The correlation between the values obtained from the d-ROMs and Fe-ROMs tests was expressed by Pearson's correlation coefficient ($r = 0.896$, $p < 0.05$). U.CARR, Carratelli units.

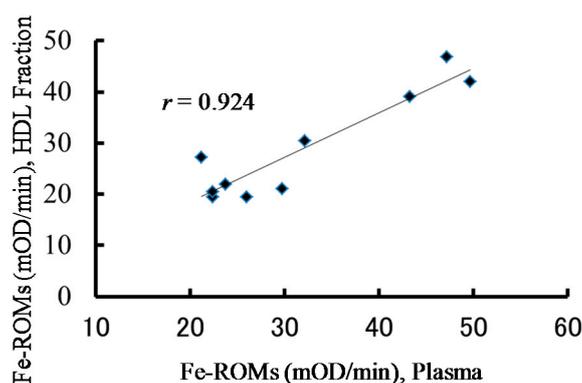


Figure S2. The correlation between the Fe-ROMs levels in the plasma and HDL fraction. HDL fractions were isolated from the plasma of 10 male patients with acute febrile disease, as described in Figure 4. The Fe-ROMs values were then measured by using these plasma samples and isolated HDL fractions. The correlation between the Fe-ROMs levels in the plasma and isolated HDL fractions is expressed by Pearson's correlation coefficient ($r = 0.924$, $p < 0.001$).

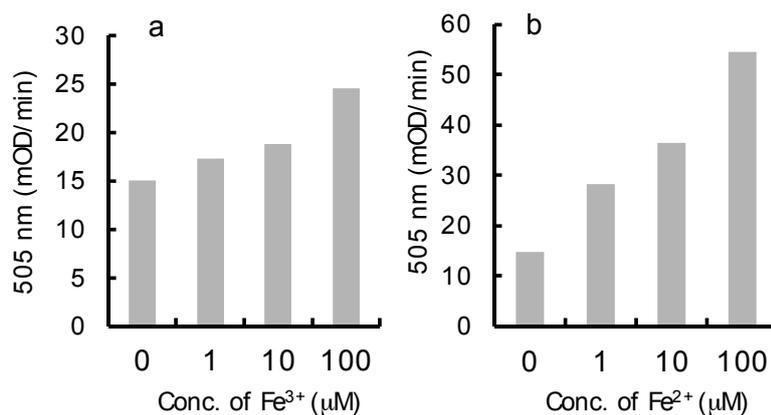


Figure S3. The dose-dependent effect of Fe³⁺ (a); and Fe²⁺ (b) on the measurement of reactive oxygen metabolites. The rates of increase in absorbance at 505 nm after the addition of plasma and *N,N'*-diethyl-*p*-phenylenediamine were determined in the presence of the indicated concentrations of iron ions. The plasma sample was obtained from a healthy subject (the concentration of iron ions in the plasma is 0.45 mM). A similar dose-dependent effect was obtained by using the plasma sample from another healthy subject (the concentration of iron ions in the plasma is 0.28 mM).