• Tüm testler “RELASSAY” markadır. (Menşai: Türkiye)

• Testlerin çalışılacağı cihaz: Mindray marka BS300 model tam otomatik biyokimya cihazı

• Test metotları: Kolorimetrik

**YÖNTEMLER**

**Paraoxonase-1 (PON-1)**

Measurement of paraoxonase activity;

Paraoxonase activity was measured using

commercially available kits (Relassay, Turkey).

The rate of paraoxon hydrolysis (diethylpnitrophenylphosphate)

was measured by monitoring the increase of

absorption at 412 nm at 37 °C. The amount of generated p-nitrophenol

was calculated from the molar absorption coefficient at pH 8.5, which

was 18.290 M−1 cm−1 Paraoxonase activity was expressed as U/L

serum

**Thiol/Disulfide Homeostasis**

Tests were measured using a novel automatic and spectrophotometric method developed by Erel and Neselioglu\* which is avaliable commercially (Rel Assay Diagnostics, Turkey) In this method, dynamic and reducible disulfide bonds in the samples were reduced to free functional thiol groups by using sodium borohydride. In order to prevent the reduction of unused reduced sodium borohydride to dithionite-2 nitrobenzoic (DTNB), NaBH4 was removed with formaldehyde. Native thiol (NT) and total thiol (TT) levels were determined after reaction with DTNB and their levels were measured ultimately. Half of the difference of the result obtained by the subtraction of native thiol amount from total thiol content indicated the disulfide (DS) level.

\* Erel O, Neselioglu S. A novel and automated assay for thiol/disulphide homeostasis. Clin Biochem. 2014;47(18):326e332.

**Myeloperoxidase (MPO)**

MPO posseses various catalytical activities. It exhibits the main catalytical activity by the

production of hypochlorous acid (HClO) from hydrogen peroxide (H2O2) and chloride anion,

Cl- (or halide). MPO also exhibits peroxidase activity that catalyzes oxidation of a number of

substrates by H2O2. These reactions categories have been widely used to assess the

activities of MPO.

The Relassay Myeloperoxidase Chlorination Activity Assay Kit and The Relassay

Myeloperoxidase Peroxidation Activity Assay Kit are quantitative and colorimetric assay kits

for measuring the myeloperoxidase activity within a sample. In the The Relassay

Myeloperoxidase Chlorination Activity Assay Kit, MPO catalyzes the formation of

hypochlorous acid, which reacts with taurine to form taurine chloroamine. Taurine

chloroamine reacts with the chromophore TNB, resulting in the formation of the colorless

product DTNB. One unit of MPO activity is defined as the amount of enzyme that hydrolyzes

the substrate and generates taurine chloramine to consume 1.0 μmole of TNB per minute.In

the The Relassay Myeloperoxidase Peroxidation Activity Assay Kit, MPO catalyzes odianisidine

to colored o-dianisidyl radical using H2O2. The increasing absorbance is

monitored at 412 nm and the activity is measured kinetically. This kit can be used manually

and easily adapted to automated analyzers