

MYELOPEROXIDASE (MPO) ASSAY



Inflammatory Marker

Myeloperoxidase (MPO) is a hemoprotein present in leukocytes of blood circulation. It is well known that in published literature, elevated levels of plasma MPO is a sensitive marker of inflammatory disorders.¹⁻⁶ MPO is involved in the oxidation of lipids contained within LDL particles, and its reaction products including hydrogen peroxide are involved in the initiation of systemic inflammation.⁷⁻¹⁰

Diazyme's Latex Enhanced Immunoturbidimetric MPO Assay is accurate, cost effective and designed to work on validated general chemistry analyzers.

DIAZYME MYELOPEROXIDASE (MPO) ASSAY ADVANTAGES

- The MPO assay is designed to work on most chemistry analyzers
- Fast test results (10 minutes) for a rapid turnaround time
- Liquid stable format requires no reagent, calibrator and control preparation
- Wide range of instrument parameters available for simplifying implementation

REGULATORY STATUS

EU:  

SKU For Export Only. Not for Distribution in the USA.

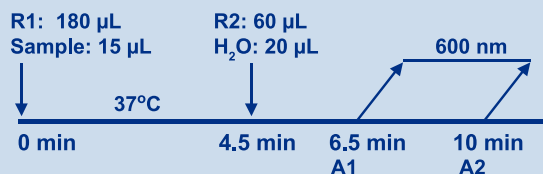
MYELOPEROXIDASE (MPO) ASSAY

Dual Vial
Liquid Stable

ASSAY SPECIFICATIONS

| | |
|---------------------------------|---|
| Method | Latex Enhanced Immunoturbidimetric Assay |
| Sample Type & Volume | <ul style="list-style-type: none"> Plasma - Lithium Heparin - EDTA <p>Sample Volume 15 μL</p> |
| Method Comparison | <p>N = 54</p> <p>y-intercept = 35.4 pmol/L</p> <p>Slope = 1.01</p> <p>R² = 0.98</p> <p>Sample Range: 218 to 4966 pmol/L</p> |
| Linearity | 83 to 5000 pmol/L |
| LOQ | 83 pmol/L |
| Calibration Levels | 5-Point Calibration |

Myeloperoxidase (MPO) Assay Procedure*



*Analyzer Dependent

For a list of validated parameters please contact Diazyme technical support at 858.455.4768 or email support@diazyme.com

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- Naruko T, Ueda M, Haze K et al.: Neutrophil infiltration of culprit lesions in acute coronary syndromes. *Circulation* 106, 2894-2900 (2002).
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ASSAY PRECISION

The simple precision of the Diazyme MPO Immunoassay was evaluated. In the study, two levels of MPO controls containing 534 pmol/L (77ng/mL) and 3824 pmol/L (551 ng/mL) MPO respectively were tested with 15 duplicates in one run.

| | Level 1: 534 pmol/L | Level 2: 3824 pmol/L |
|------------------------------|------------------------|-------------------------|
| Number of Data Points | 15 | 15 |
| Mean (pmol/L) | 534 | 3824 |
| SD (pmol/L) | 15 | 158 |
| CV (%) | 2.7% | 4.1% |

ASSAY INTERFERENCE

The substances normally present in the plasma were tested. Less than 10% deviation was produced when tested up to the concentrations shown below:

| | |
|------------------------|-----------|
| Ascorbic Acid: | 10 mM |
| Bilirubin, free: | 40 mg/dL |
| Bilirubin, conjugated: | 40 mg/dL |
| Hemoglobin: | 200 mg/dL |
| Triglyceride: | 270 mg/dL |
| Rheumatoid Factor: | 75 IU/mL |

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