PATHFAST® NT-proBNP
REAGENT FOR PATHFAST®
60 Determinations

B-type natriuretic peptide (BNP) is a small peptide (32 amino acids) secreted by heart myocytes to augment regulation of blood pressure and fluid balance. This peptide is synthesized by ventricular cells and stored as ProBNP (108 amino acids). ProBNP is secreted into the bloodstream as the 32 (77 – 108) amino acids active BNP and the N-terminal fragment of 76 (1 – 76) amino acids designated NT-proBNP. Determination of NT-proBNP helps to identify individuals with left ventricular dysfunction. Changes in NT-proBNP concentration can be used to evaluate the success of treatment in patients with left ventricular dysfunction. Stability of NT-proBNP in whole blood samples is 72 hours.

Package Content

60 determinations
2 calibrators (2x low, 2x high), 2 diluents additionally required:
1 pipette tip per canal (42 pipettes/box)

Sample Material

For testing 100 µl of whole blood or plasma samples are taken with qualified collection tubes containing heparin-Na, heparin-Li, EDTA-Na or EDTA-K.

Reference Range

95 % range (from the 2.5th to 97.5th percentile): 8.1 – 128.3 pg/ml
in 102 healthy individuals

Specific Performance Data

1. Test measuring range:
15 – 30,000 pg/ml

Test Principle
2. Method comparison (plasma samples):
   \[ y = 1.01x + 2.6; \ r = 0.99; \ n = 795 \]
   (y: this method; \ x: Elecsys® proBNP),
   Further method comparisons on request.

3. Correlation between whole blood and plasma:
   \[ y = 1.04x + 2.9; \ r = 0.991; \ n = 48 \]
   (y: whole blood, x: plasma)

4. Standardization:
   The calibrators for PATHFAST® NT-proBNP are synthetic NT-proBNP by Roche Diagnostics GmbH.

5. Detection Limit:
   15 pg/ml

<table>
<thead>
<tr>
<th>Measuring range</th>
<th>Precision</th>
<th>Overall precision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample</td>
<td>Mean value (pg/ml)</td>
<td>S.D. (pg/ml)</td>
</tr>
<tr>
<td>QC-L</td>
<td>239</td>
<td>10.5</td>
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<tr>
<td>QC-M</td>
<td>2388</td>
<td>97.0</td>
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<tr>
<td>QC-H</td>
<td>12058</td>
<td>564</td>
</tr>
</tbody>
</table>

Literature


2. Struthers AD. How to use natriuretic peptide levels for diagnosis and prognosis. The European Society of Cardiology. EurHeart J 1999; 20: 1374-1375

