MERCODIA BOVINE INSULIN ELISA
10-1201-01

WHEN ACCURACY MATTERS
www.mercodia.com
Intended use
A high quality enzyme immunoassay for the quantification of bovine insulin in serum or plasma.

Test principle
Mercodia Bovine Insulin ELISA is a solid phase two-site enzyme immunoassay based on the sandwich technique, in which two monoclonal antibodies are directed against separate antigenic determinants on the insulin molecule. Insulin in the sample reacts with anti-insulin antibodies bound to microtitration wells and peroxidase-conjugated anti-insulin antibodies in the solution.

Test characteristics

Sensitivity
The detection limit is 0.025 µg/L as determined with the methodology described in ISO11843-Part 4.

Recovery
Recovery upon addition is 86 - 107 % (96 %).
Recovery upon dilution is 91 - 131 % (107 %).

Precision
Each sample was analyzed in 4 replicates on 20 different occasions.

<table>
<thead>
<tr>
<th>Sample</th>
<th>Mean value (µg/L)</th>
<th>within assay %</th>
<th>between assay %</th>
<th>total assay %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.224</td>
<td>5.3</td>
<td>6.7</td>
<td>7.2</td>
</tr>
<tr>
<td>2</td>
<td>0.497</td>
<td>3.9</td>
<td>7.0</td>
<td>7.3</td>
</tr>
<tr>
<td>3</td>
<td>1.401</td>
<td>2.3</td>
<td>6.7</td>
<td>6.8</td>
</tr>
</tbody>
</table>

Performance limitations
Grossly lipemic, icteric or haemolyzed samples do not interfere in the assay.

Specificity
The following cross-reactions have been tested:

- NovoRapid: 3.8 %
- Levemir: < 0.0000004 %
- Lantus: 28 %
- Humalog: < 0.000001 %

Samples
Serum, EDTA, heparin and citrate plasma can be used

Measurement range
0.05 - 3.0 µg/L

Catalog No
10-1201-01  1 x 96 wells

Summary of protocol
- Add 25 µL Calibrators, controls and samples
- Add 100 µL enzyme conjugate solution
- Incubate 2 hour on shaker at room temperature
- Wash plate 6 times
- Add 200 µL Substrate TMB
- Incubate 15 minutes at room temperature
- Add 50 µL Stop Solution
  - Shake for approximately 5 seconds on shaker
- Measure at 450 nm