Diazyme’s Lipase Assay is a cost effective dual vial stable liquid method which utilizes industry standard 6’ Methylresorufin ester for consistent reliable performance. The test has a ten-fold reduction in interference from triglycerides and cholesterol in comparison to older 1, 2 diglyceride method for improved accuracy. Determination of lipase is used for diagnosis and treatment of diseases of the pancreas such as acute and chronic pancreatitis and obstruction of the pancreatic duct.

**DIAZYME LIPASE ASSAY ADVANTAGES**

- Fast test results (under 10 minutes) for a rapid turnaround time
- Liquid stable reagent, calibrator and controls are offered separately for added convenience
- User friendly instrument specific packaging options available
- A wide range of instrument parameters are offered for facilitating and simplifying implementation

**REGULATORY STATUS**

510(k) Exempt

**AVAILABLE INSTRUMENT SPECIFIC PACKAGING**

- Roche - Hitachi
- Beckman - AU Series
**ASSAY PRECISION**

Intra-Assay Precision was determined on 20 replicates of each control (3 levels - L1/L2/L3).

<table>
<thead>
<tr>
<th></th>
<th>Average U/L</th>
<th>SD</th>
<th>CV%</th>
</tr>
</thead>
<tbody>
<tr>
<td>L1</td>
<td>11.80</td>
<td>2.63</td>
<td>22.27%</td>
</tr>
<tr>
<td>L2</td>
<td>119.20</td>
<td>4.14</td>
<td>3.47%</td>
</tr>
<tr>
<td>L3</td>
<td>215.35</td>
<td>6.11</td>
<td>2.84%</td>
</tr>
</tbody>
</table>

Inter-Assay Precision was determined in accordance with NCCLS Document EP5-T (3 levels - L1/L2/L3).

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Within run</th>
<th>Run to run</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>U/L</td>
<td></td>
<td>SD</td>
<td>CV%</td>
<td>SD</td>
</tr>
<tr>
<td>L1</td>
<td>11.65</td>
<td>2.55</td>
<td>21.88%</td>
<td>1.17</td>
</tr>
<tr>
<td>L2</td>
<td>119.55</td>
<td>4.13</td>
<td>3.45%</td>
<td>5.43</td>
</tr>
<tr>
<td>L3</td>
<td>215.03</td>
<td>5.97</td>
<td>2.78%</td>
<td>10.79</td>
</tr>
</tbody>
</table>

**ASSAY INTERFERENCE**

Triglycerides give a negative interference on lipase determination (-6%) from a 300 mg/dL concentration. The test is not affected by hemoglobin up to 150 mg/dL and bilirubin concentration up to 20 mg/dL.

**ASSAY REFERENCE RANGE**

Lipase in normal subjects (U/L methylresorufin at 37 °C): ≤ 38 U/L

The study has been done on 237 healthy patients (116 males and 121 females); all of them have been previously tested for pancreatic amylase and found normal. The obtained data was processed with non parametric method. The upper limit of the normal range, calculated at 97.5% percentile, is 37.8 U/L with a 90% confidence range between 35.0 and 43.4 U/L; 95% of the tested population showed lipase values ≤ 37.8 U/L. Slight differences could be observed on a different population. It is recommended that each laboratory establish its own expected range characteristic for the local population.

**ASSAY SPECIFICATIONS**

- **Method**: Kinetic assay monitoring at 580 nm of the enzymatic cleavage of a synthetic substrate (6' Methylresorufin)
- **Sample Type & Volume**: • Serum • Plasma 
  Sample Volume 2.5 μL
- **Method Correlation**: N = 101 
y-intercept = 3.9443 
Slope = 0.50054 
R² = 0.99732 
-Excellent correlation to Roche’s 6’ Methylresorufin method
- **Linear Range**: Up to 250 U/L
- **LOD**: 5 U/L
- **Calibration Levels**: 2-Point Calibration
- **Reagent On-Board Stability**: Opened: 90 days when stored at 2-8°C

**Lipase Assay Procedure**

R1: 250 μL 
Sample: 2.5 μL 
R2: 50 μL 
(570-590 nm)

37°C 5 7 10 min A1 A2

*Analyzer Dependent

Parameter questions for Lipase Assay should be addressed to Diazyme technical support. Please call 858.455.4768 or email support@diazyme.com

DZ043 (04/2017)