It has been recognized that it is important to measure insulin in plasma of rodent in non-clinical test of drug development of type 2 diabetes. Measuring insulin in fasting (F-IRI) for calculation of HOMA-R that is a marker of insulin resistance is especially critical, however it was difficult to measure F-IRI in normal rat and mouse samples that is very low concentration by existing commercially available assay kit.

This assay kit consists of 2 specific monoclonal antibodies (clone: 13G4 and 26B2) that were obtained using antibody maturation technique (ref.1) and we have achieved to develop the kit with 10 to 20 times higher sensitivity than currently available commercial kits. The assay kit can measure total insulin less than 0.1ng/mL in normal mouse and rat samples in fasting because of the superior sensitivity.

<table>
<thead>
<tr>
<th>Produce Code</th>
<th>Product Name</th>
<th>Volume</th>
<th>Measurement Range</th>
<th>Sample Type</th>
<th>Sample Volume</th>
<th>Measuring Samples</th>
</tr>
</thead>
<tbody>
<tr>
<td>27705</td>
<td>Mouse/Rat Total Insulin (high sensitivity) Assay Kit - IBL ELISA</td>
<td>96 well</td>
<td>1.25~ 80 pg/mL</td>
<td>M/R</td>
<td>2μL</td>
<td>○ O</td>
</tr>
<tr>
<td>Under Development</td>
<td>Mouse/Rat Total Insulin (High sensitivity) Assay Kit - IBL CLEIA</td>
<td>96 well</td>
<td>1.5~ 30000 pg/mL</td>
<td>M/R</td>
<td>5μL</td>
<td>○ O</td>
</tr>
</tbody>
</table>

M: Mouse R: Rat

Measurement insulin in mouse plasma samples.

Coating: Room Temperature, 60 min
1st reaction: 2~8°C, Overnight
(ELISA)
2nd reaction: 2~8 °C, 60 min
Chromogen : HRP/TMB 30 min
(CLEIA: Chemiluminescent Enzyme Immuno Assay)
2nd reaction : Room Temperature,
2 ~ 3 hours
Luminescence : ALP/CDP-Star,
15 ~ 20min

Reference