Case - Intraperitoneal Insulin Tolerance Test

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ABSTRACT

Summary:

This is the standard protocol for routine insulin tolerance testing. It is performed on awake mice, fasted for 18 hr (overnight) or for 6 hours.

DOI:

dx.doi.org/10.17504/protocols.io.yefftbn

External link:


Protocol Citation:


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Protocol status:

Working

We use this protocol and it's working
MATERIALS

Reagents and Materials:

<table>
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<th>Reagent/Material</th>
<th>Quantity Required</th>
<th>Vendor</th>
<th>Stock Number</th>
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<tbody>
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<td>Insulin</td>
<td>0.75U-1.0U per mouse</td>
<td>Eli Lilly</td>
<td></td>
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<td>1cc syringe 26g BD Biosciences</td>
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Note:

BD Biosciences, RRID:SCR_013311
Abbott, RRID:SCR_010477

1 Fast mice for overnight or for 6 hours. Remove mouse from cage and put into a clean cage with water and no food.

2 Label the mice using a marker on their tail to quickly tell them apart

3 Weigh each mouse and record weight. Calculate the amount of insulin needed for 0.75U to 1.0 U/kg body weight. Record the volume for each mouse.
4 Dilute the stock of insulin (100U/ml) to 0.1u/ml

5 Take a glucose reading and record it as time zero. Dip tail into clotisol to clot blood.

6 Inject each mouse 3’ apart. Repeat #4 at 15min, 30 min, 60 min after IP injection of insulin.

7 Return mice to cage with food.