**TSH IRMA**

**SOLID PHASE COMPONENT SYSTEM**

- COATED TUBE IMMUNORADIOMETRIC ASSAY
- COMPONENT SYSTEM MINIMIZES WASTE
- STANDARD RANGE: 0.2 - 80 µU/ml
- SENSITIVITY OF 0.06 µU/ml
- LIQUID REAGENTS – READY-TO-USE
- SINGLE 3 HOUR INCUBATION

**PROCEDURE:**

1. Add 200 µl of standards, controls or sample to the coated tubes.
2. Add 500 µl of ¹²⁵I Anti-TSH to each tube and mix well.
3. Incubate 3 hours at 37°C.
4. Decant contents and wash twice.
5. Count tubes in gamma counter calibrated for ¹²⁵I.
6. Construct a standard curve and determine unknown concentrations.

**CLINICAL SIGNIFICANCE**

TSH is a pituitary hormone that regulates secretion of T₃ and T₄. TSH levels are an indirect but highly sensitive index of thyroid function.

**MEASUREMENTS ARE USEFUL FOR**

- Diagnosis of hypothyroidism
- Diagnosis of hyperthyroidism
- Evaluation of hypothalamic or pituitary dysfunction following a TRH stimulation test

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ICN Pharmaceuticals, Inc.
3300 Hyland Avenue
Costa Mesa, California 92626
**TEST PRINCIPLE**

The TSH IRMA kit is a solid phase sandwich immunoradiometric assay which uses polyclonal anti-human hTSH antibodies (PcAB) immobilized on the plastic tubes as capture reagent and an iodinated monoclonal antibody (McAB) as tracer.

Samples containing TSH react with polyclonal antibodies coated on plastic tubes and with the tracer (an iodinated monoclonal antibody). After the formation of the PcAB/TSH/McAB \(^{125}\text{I}\) sandwich, the unbound tracer is removed by washing. The radioactivity remaining bound to the solid phase is measured with a gamma counter. A standard curve is generated from which the TSH value in the samples is determined.

**ASSAY CORRELATION**

![Graph showing assay correlation](image)

- **Comparison TSH IRMA Kit (µU/mL)**
  - **ICN TSH IRMA Kit (µU/mL)**
  - **n = 70**
  - **y = 0.84x + 0.21**
  - **r = 0.995**

**TO ORDER CALL (800) 854-0530**

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**PRECISION**

**INTRA-ASSAY PRECISION (µU/ml)**

<table>
<thead>
<tr>
<th>LEVEL</th>
<th>I</th>
<th>II</th>
<th>III</th>
<th>IV</th>
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<tbody>
<tr>
<td>n</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>mean</td>
<td>0.52</td>
<td>1.10</td>
<td>4.69</td>
<td>25.6</td>
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<tr>
<td>SD</td>
<td>0.08</td>
<td>0.10</td>
<td>0.23</td>
<td>1.3</td>
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<tr>
<td>%CV</td>
<td>16.2</td>
<td>9.4</td>
<td>4.8</td>
<td>5.0</td>
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</table>

**INTER-ASSAY PRECISION (µU/ml)**

<table>
<thead>
<tr>
<th>LEVEL</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
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<tbody>
<tr>
<td>n</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>mean</td>
<td>0.43</td>
<td>1.11</td>
<td>4.76</td>
<td>27.0</td>
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<tr>
<td>SD</td>
<td>0.06</td>
<td>0.07</td>
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<td>1.13</td>
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<tr>
<td>%CV</td>
<td>13.3</td>
<td>6.0</td>
<td>4.9</td>
<td>4.2</td>
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</tbody>
</table>

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**SAMPLE STANDARD CURVE**

![Graph showing sample standard curve](image)