Abcam's TSH Human ELISA (Enzyme-Linked Immunosorbent Assay) kit is an *in vitro* enzyme-linked immunosorbent assay for the quantitative measurement of Human TSH in serum, plasma and cell culture supernatants.

This assay employs an antibody specific for Human TSH coated on a 96-well plate. Standards and samples are pipetted into the wells and TSH present in a sample is bound to the wells by the immobilized antibody. The wells are washed and biotinylated anti-Human TSH antibody is added. After washing away unbound biotinylated antibody, HRP-conjugated streptavidin is pipetted to the wells. The wells are again washed, a TMB substrate solution is added to the wells and color develops in proportion to the amount of TSH bound. The Stop Solution changes the color from blue to yellow, and the intensity of the color is measured at 450 nm.

**Sample specific recovery**

<table>
<thead>
<tr>
<th>Sample type</th>
<th>Average %</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cell culture supernatant</td>
<td>82.76</td>
<td>70% - 90%</td>
</tr>
<tr>
<td>Serum</td>
<td>97.89</td>
<td>75% - 120%</td>
</tr>
<tr>
<td>Plasma</td>
<td>78.59</td>
<td>67% - 86%</td>
</tr>
</tbody>
</table>

**Notes**

Optimization may be required with urine samples.

**Tested applications**

*Suitable for:* Sandwich ELISA
Relevance
Thyroid stimulating hormone, also known as thyrotropin, is secreted from cells in the anterior pituitary called thyrotrophs, finds its receptors on epithelial cells in the thyroid gland, and stimulates that gland to synthesize and release thyroid hormones. TSH is a glycoprotein hormone composed of two subunits which are non covalently bound to one another. The alpha subunit of TSH is also present in two other pituitary glycoprotein hormones, follicle stimulating hormone and luteinizing hormone, and, in primates, in the placental hormone chorionic gonadotropin. Each of these hormones also has a unique beta subunit, which provides receptor specificity. In other words, TSH is composed of alpha subunit bound to the TSH beta subunit, and TSH associates only with its own receptor. Free alpha and beta subunits have essentially no biological activity.

Cellular localization
Secreted

Applications
Our Abpromise guarantee covers the use of ab100660 in the following tested applications.
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

<table>
<thead>
<tr>
<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sandwich ELISA</td>
<td></td>
<td>Use at an assay dependent concentration.</td>
</tr>
</tbody>
</table>
Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit https://www.abcam.com/abpromise or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors