PRODUCT SPECIFICATIONS

Name
Anti-α Alpha Subunit 5503 SP-1

Specificity
Antibody recognizes the alpha subunit of human chorionic gonadotropin (hCG), luteinizing hormone (LH), follicle-stimulating hormone (FSH), and thyroid-stimulating hormone (TSH)

Description
Monoclonal mouse antibody, cultured in vitro under conditions free from animal-derived components

Product code
100037

Product buffer solution
0.9 % NaCl, 0.095 % NaN₃ as a preservative

Shelf life and storage
6 months from manufacturing at 2–8 °C

Analyte description
The alpha subunits of gonadotropins LH, FSH, TSH, and hCG are identical. The human alpha subunit consists of 92 amino acids, and has an average molecular weight of 14 kDa.

PARAMETERS TESTED ON EACH LOT

Product appearance
Liquid, may turn slightly opaque during storage

Product concentration
1.0 mg/ml (+/- 10 %)

Immunoreactivity
80–120 % compared to the reference sample in an FIA test

IEF Profile
6.6 – 8.2

Purity
≥ 95 %

PARAMETERS DETERMINED DURING PRODUCT DEVELOPMENT

Subclass
IgG₁

Association rate constant
1.7 x 10⁶ 1/Ms

Dissociation rate constant
5.3 x 10⁻⁴ 1/s

Affinity constant
Kₐ = 3.2 x 10⁹ 1/M; Kᵋ = 3.2 x 10⁻¹⁰ M (= 0.32 nM)

Determination method
SPR analysis (ProteOn XPR36)

Determination antigen
hCG, Scripps (Cat C0714, Lot 2430801)
**Cross-reactivities**

No cross-reactivity with hCG, LH, FSH, or TSH β subunits

**Epitope**

Not Determined (N/D)

**Pair recommendations**

<table>
<thead>
<tr>
<th>CAPTURE ANTIBODY</th>
<th>DETECTION ANTIBODY</th>
</tr>
</thead>
<tbody>
<tr>
<td>hCG, LH, FSH, or TSH β subunit specific antibody</td>
<td>5503</td>
</tr>
</tbody>
</table>

Please note that pair recommendations are based on results obtained by our laboratory. Equally good results may be obtained using other pairs and therefore these recommendations are only indicative.

**Product stability**

<table>
<thead>
<tr>
<th>TEMPERATURE, TIME</th>
<th>RESULT</th>
</tr>
</thead>
<tbody>
<tr>
<td>-70 °C, 21 days</td>
<td>N/D</td>
</tr>
<tr>
<td>-20 °C, 21 days</td>
<td>N/D</td>
</tr>
<tr>
<td>+4 °C, 21 days</td>
<td>N/D</td>
</tr>
<tr>
<td>+35 °C, 7 days</td>
<td>N/D</td>
</tr>
<tr>
<td>+35 °C, 21 days</td>
<td>N/D</td>
</tr>
<tr>
<td>+45 °C, 3 days</td>
<td>N/D</td>
</tr>
<tr>
<td>+45 °C, 7 days</td>
<td>N/D</td>
</tr>
</tbody>
</table>

Stability testing is performed in the product buffer to see whether different temperatures affect the antigen binding, charge or composition of the antibody. Please note that the shelf life given on the first page is based on real time stability testing at 2–8 °C in the product buffer.

**Miscellaneous**

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**References**

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