PRODUCT SPECIFICATIONS

Name
Anti-h GH 5801 SP-1

Specificity
Antibody recognizes human growth hormone (GH)

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

Product code
100041

Product buffer solution
0.9 % NaCl, 0.095 % NaN$_3$ as a preservative

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

Analyte description
Growth hormone (GH) is a single-chain polypeptide hormone that is synthesized, stored, and secreted by the anterior pituitary gland. It stimulates growth and cell reproduction and regeneration in humans and other animals. Growth hormone is used clinically to treat children’s growth disorders and adult growth hormone deficiency.

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
6.1 – 7.4

Purity
≥ 95 %

PARAMETERS DETERMINED DURING PRODUCT DEVELOPMENT

Subclass
IgG$_1$

Association rate constant
Not Determined (N/D)

Dissociation rate constant
N/D

Affinity constant
2 \times 10^{10} \text{ l/mol}

Determination method
Radioimmunoassay (RIA)

Determination antigen
GH, Boehringer (Cat 252964, Lot 1222303)
Cross-reactivities

<table>
<thead>
<tr>
<th>Antigen</th>
<th>Cross-reactivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRL</td>
<td>1.0 % (International Laboratory Service, Lot 11385)</td>
</tr>
<tr>
<td>PL</td>
<td>0.2 % (UCB-Bioproducts, Cat i020, Lot 007)</td>
</tr>
</tbody>
</table>

Epitope

N/D

Pair recommendations

<table>
<thead>
<tr>
<th>CAPTURE ANTIBODY</th>
<th>DETECTION ANTIBODY</th>
</tr>
</thead>
<tbody>
<tr>
<td>5802</td>
<td>5801</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

The antibody recognizes growth hormone isoform 22K, and does not recognize isoform 20K. Others not tested.

References