PRODUCT SPECIFICATIONS

Name
Anti-h Thyroglobulin 2803 SPTN-5

Specificity
Antibody recognizes human thyroglobulin

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

Product code
100332

Product buffer solution
50 mM Na-citrate, pH 6.0, 0.9 % NaCl, 0.095 % NaN₃ as a preservative

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

Analyte description
Thyroglobulin is a 660 kDa dimeric protein produced by and used entirely within the thyroid gland to produce the thyroid hormones thyroxine (T4) and triiodothyronine (T3). Thyroglobulin levels in the blood can be used as a tumor marker for certain kinds of thyroid cancer. Thyroglobulin levels in the blood can also be elevated in cases of Graves’ disease.

PARAMETERS TESTED ON EACH LOT

Product appearance
Liquid, may turn slightly opaque during storage

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

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

IEF Profile
6.9 – 8.0

Purity
≥ 95 %

PARAMETERS DETERMINED DURING PRODUCT DEVELOPMENT

Subclass
IgG₂b

Association rate constant
1.7 x 10⁵ 1/Ms

Dissociation rate constant
3.7 x 10⁻⁵ 1/s

Affinity constant
Kₐ = 4.5 x 10⁹ 1/M; Kₒ = 2.2 x 10⁻¹⁰ M (=0.22 nM)

Determination method
SPR analysis (ProteOn XPR36)

Determination antigen
Thyroglobulin, Fitzgerald (Cat 30-AT01, Lot A11102002)
**Cross-reactivities**

No cross-reactivity against thyroid peroxidase, others not tested.

**Epitope**

Not Determined (N/D)

**Pair recommendations**

<table>
<thead>
<tr>
<th>CAPTURE ANTIBODY</th>
<th>DETECTION ANTIBODY</th>
</tr>
</thead>
<tbody>
<tr>
<td>2803</td>
<td>2804, 2805</td>
</tr>
<tr>
<td>2805</td>
<td>2803</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>OK</td>
</tr>
<tr>
<td>-20 °C, 21 days</td>
<td>OK</td>
</tr>
<tr>
<td>+4 °C, 21 days</td>
<td>OK</td>
</tr>
<tr>
<td>+25 °C, 21 days</td>
<td>OK</td>
</tr>
<tr>
<td>+35 °C, 21 days</td>
<td>OK</td>
</tr>
<tr>
<td>+45 °C, 7 days</td>
<td>OK</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**

T3 or T4 has no effect on the binding of this antibody.

**References**

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