PRODUCT SPECIFICATIONS

Name: Anti-h Thyroglobulin 2804 SPTN-S

Specificity: Antibody recognizes human thyroglobulin

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

Product code: 100333

Product buffer solution: 50 mM Na-citrate, pH 6.0, 0.9 % NaCl, 0.095 % NaN\textsubscript{3} 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: 6.8 – 7.5

Purity: ≥ 95 %

PARAMETERS DETERMINED DURING PRODUCT DEVELOPMENT

Subclass: \textit{IgG\textsubscript{1}}

Association rate constant: 7.2 \times 10^4 1/\textit{Ms}

Dissociation rate constant: 7.9 \times 10^{-4} 1/\text{s}

Affinity constant: \textit{K_A} = 9.1 \times 10^7 1/M; \textit{K_D} = 1.1 \times 10^{-8} \text{M} (=11 \text{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, 2805</td>
<td>2804</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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