

## PRODUCT SPECIFICATIONS

Date: 2015-05-12

<b>PRODUCT NAME</b>	:	Anti-h Thyroglobulin 2804 SPTN-5
<b>PRODUCT SPECIFICITY</b>	:	Human Thyroglobulin
<b>PRODUCT CODE</b>	:	100333
<b>PRODUCT BUFFER</b>	:	50 mM Na-citrate, pH 6.0, 0.9 % NaCl, 0.095 % NaN <sub>3</sub> as a preservative.
<b>SHELF LIFE AND STORAGE</b>	:	12 months at 2-8 °C
<b>ANALYTE DESCRIPTION</b>	:	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 FROM EACH LOT

<b>PRODUCT APPEARANCE</b>	:	Clear liquid, may precipitate during storage which does not alter the product specifications. Precipitate can be removed by centrifugation or filtering.
<b>PRODUCT CONCENTRATION</b>	:	5.0 mg/ml (+/- 10 %)
<b>PRODUCT ACTIVITY</b>	:	80 – 120 % compared to reference in an IFMA-test
<b>IEF-RANGE</b>	:	6.9 – 7.5
<b>PURITY</b>	:	≥ 95 %

## PARAMETERS DETERMINED ONLY DURING PRODUCT R&amp;D PHASE

<b>CLASS AND SUBCLASS</b>	:	IgG <sub>1</sub>
<b>ASSOCIATION CONSTANT</b>	:	7.2 x 10 <sup>4</sup> 1/Ms
<b>DISSOCIATION CONSTANT</b>	:	7.9 x 10 <sup>-4</sup> 1/s
<b>AFFINITY CONSTANT</b>	:	KA = 9.1 x 10 <sup>7</sup> 1/M; KD = 1.1 x 10 <sup>-8</sup> M (= 11 nM)
<b>DETERMINATION METHOD</b>	:	SPR analysis (BioRad ProteOn XPR36)
<b>ANTIGEN</b>	:	Thyroglobulin (Fitzgerald cat.no. 30-AT01, lot#A11102002)
<b>CROSS-REACTIVITIES</b>	:	No cross-reactivity against Thyroid Peroxidase, others not tested.

**EPITOPE** : N/D

**EPITOPE GROUP** : N/A

Two antibodies binding to the same, or closely located epitopes, belong to the same group and hence cannot be used as a pair in a sandwich assay. Epitope group numbering does not give any detailed information where the epitope is located.

**PAIR RECOMMENDATIONS** : **SOLID** **LABEL**

2803, 2805 2804

Please note that pair recommendations are based on results obtained in our laboratory. Equally good results may be obtained using other pairs and therefore these recommendations should be taken only as a directive.

**PRODUCT STABILITY** : **TEMPERATURE, DAYS** **RESULT**

Please note that the shelf life given on page one is based on real time stability testing at +2-8 °C in the product buffer.

-70 °C, 21 days	OK
-20 °C, 21 days	OK
+4 °C, 21 days	OK
+25 °C, 21 days	OK
+35 °C, 21 days	OK
+45 °C, 7 days	OK

Stability testing is performed in the product buffer to see whether different temperatures affect the antigen binding, charge or composition of the antibody. The maximum duration of the test is 21 days, except for the +45 °C only 7 days.

**pH, 14 DAYS, +4 °C** **RESULT**

5.0	OK
6.0	OK
7.0	OK
8.0	OK

Stability testing is performed to see whether pH affects the antigen binding, charge or composition of the antibody during 14 days at +4 °C.

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

**REFERENCES** :

### Legal disclaimer

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