

Product specifications

Name	Anti-h Thyroglobulin 2803 SPTN-5
Specificity	Antibody recognizes human thyroglobulin
Description	Monoclonal mouse antibody, cultured <i>in vitro</i> 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 % NaN ₃ as a preservative
Shelf life and storage	36 months from manufacturing at 2–8 °C
Subclass	IgG _{2b}
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	6.5–8.0
Purity	≥ 95 %

Kinetic parameters

Association rate constant	1.7×10^5 1/Ms
Dissociation rate constant	3.7×10^{-5} 1/s
Affinity constant	$K_A = 4.5 \times 10^9$ 1/M; $K_D = 2.2 \times 10^{-10}$ M (=0.22 nM)
Determination method	SPR analysis (ProteOn XPR36)
Determination antigen	Thyroglobulin, Fitzgerald (Cat 30-AT01, Lot A11102002)

Cross-reactivities Does not recognize thyroid peroxidase, others not tested.

Epitope Not Determined (N/D)

Pair recommendations

		DETECTION			
		2802	2803	2804	2805
CAPTURE	2802	-	-	+	+
	2803	-	-	+	+
	2804	-	-	-	-
	2805	+	+	+	-

Following pairs are especially recommended for the below mentioned assays:
FIA: 2802 (capture) – 2805 (detection)

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.

Platforms tested FIA

Antigens tested Native Thyroglobulin antigen, Lee Biosolutions 528-11

TEMPERATURE, TIME	RESULT
-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. 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 -

