

2023-04-04

Anti-h Thyroglobulin 2802 SPTN-5

Product overview

Catalog number 100331

Specificity Antibody recognizes human thyroglobulin

Description Monoclonal mouse antibody, cultured *in vitro* under conditions free from

animal-derived components.

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

Shelf life and storage 24 months from manufacturing at 2–8 °C

 $\begin{tabular}{l} Subclass & IgG_1 \end{tabular}$

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 cancers. 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 6.7–8.2

Purity $\geq 95\%$

Kinetic parameters

Association rate constant 8.6 x 10³ 1/Ms

Dissociation rate constant 1.2 x 10⁻⁵ 1/s

Affinity constant $K_A = 7.3 \times 10^8 \text{ 1/M}; K_D = 1.4 \times 10^{-9} \text{ M} (=1.4 \text{ nM})$

Determination method SPR analysis (ProteOn XPR36)

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





Product specification ANTIBODY

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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

Product stability 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 -

