

Product specification ANTIBODY

2023-05-23

Anti-Thyroxine 6902 SPTN-5

Product overview

Catalog number 100801

Specificity Antibody recognizes human thyroxine

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 18 months from manufacturing at 2–8 °C

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

Analyte description Thyroxine, or 3,5,3',5'-tetraiodothyronine (often abbreviated as T4) is the

major hormone secreted by the thyroid gland. T4 is transported in blood, with 99.95 % of the secreted T4 being protein bound, principally to thyroxine-binding globulin (TBG). T4 is involved in controlling the rate of metabolic processes in the body and influencing physical development. Thyroxine is a prohormone and a reservoir for the active thyroid hormone

triiodothyronine (T3) which is about four times more potent.

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 6.7–7.6

Purity $\geq 95 \%$

Kinetic parameters

Association rate constant 1.7 x 10⁶ 1/Ms

Dissociation rate constant Not Applicable (N/A)

Affinity constant N/A

Determination method BLI (Octet RED96e)

Determination antigen Thyroxine (T4) BSA Conjugate, Medix Biochemica (Cat 581-10)





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Cross-reactivities T3 (3,3',5-triiodothyronine) 1.5 % (Sigma, Cat T2752)

rT3 (3,3',5'-triiodothyronine, reverse T3) 1.5 % (Sigma, Cat T0281) 3,5-diiodothyronine < 0.1 % (Sigma, Cat D0629)

Epitope N/D

Pair recommendations CAPTURE ANTIBODY DETECTION ANTIBODY

Platforms tested FIA

Antigens tested Thyroxine (T4) antigen, BSA conjugate, Lee Biosolutions 581-10

Product stability TEMPERATURE, TIME RESULT

-70 °C, 21 days OK
-20 °C, 21 days OK
+4 °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 -

References -

