

Bio-Rad Laboratories  
The Clear Choice in Autoimmune Testing



# Anti-Tg

## Autoimmune EIA

### Simple, Objective, Sensitive, Specific

Bio-Rad offers the most comprehensive menu of EIA assays available today, with a constantly expanding menu that includes new clinically relevant assays.

The Bio-Rad Kallestad™ Anti-Thyroglobulin (anti-Tg) test is a quantitative/qualitative enzyme-linked immunosorbent assay (ELISA) for the detection of autoantibodies specific for thyroglobulin in human serum or plasma. It is intended to aid in the multicriterion diagnostic process of autoimmune thyroid disorders.

### Product Highlights

- Common assay protocol and reagents
- Color-coded breakaway wells
- Quantitative and qualitative result interpretations
- Easy-to-automate



### Clinical Utility

Thyroglobulin (Tg), thyroid peroxidase (TPO) and the TSH receptor are considered the major autoantigens associated with chronic autoimmune thyroiditis. Clinical diagnosis is usually based on the presence of serum or plasma autoantibodies to Tg and TPO. In Graves' disease (chronic primary hyperthyroidism), the TSH receptor is the antigen most directly involved in clinical manifestations of the disease.<sup>1</sup>

Anti-Tg autoantibodies are predominantly of the IgG class. They are detected, often with TPO autoantibodies, in the majority of Graves' disease and Hashimoto's, including other variants of chronic primary hypothyroidism such as myxoedema and asymptomatic thyroiditis. They have also been detected in spontaneous or post-partum painless thyroiditis, in thyroid autoimmunity with rheumatoid arthritis, and in non-thyroid autoimmune diseases such as Addison's disease and Type 1 diabetes mellitus.

**BIO-RAD**

# Anti-Thyroglobulin (Tg)

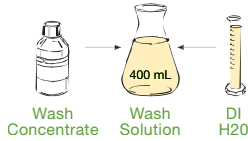


## Autoimmune ELISA Procedure – Kallestad Anti-Tg

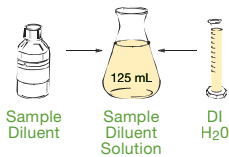
### Pre-Test Setup Instructions

**1** Bring all reagents to room temperature (18-25°C) 30 min. before use.

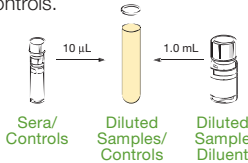
**2** Prepare the Wash Solution.



**3** Prepare Sample Diluent Solution.



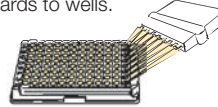
**4** Make 1:100 working solutions of patient's sera and Positive/Negative Controls.



### Test Procedure (See Procedure Notes and Pre-Test Setup Instructions)

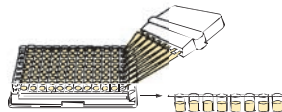
- **QUALITATIVE PROTOCOL** – Run Reference Control, Positive/Negative Controls and Samples
- **QUANTITATIVE PROTOCOL** – Run Stancarc (J-4), Positive/Negative Controls and Samples.

**1** Apply 100 µL diluted patient samples, controls and standards to wells.

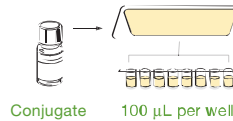


**2** Incubate wells 60 ± 5 minutes at room temperature (18-25°C).

**3** Wash wells 5x with 200 µL of Wash Solution. Remove all liquid before proceeding.



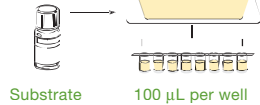
**4** Apply 100 µL HRP Conjugate to all wells.



**5** Incubate for 30 ± 5 minutes at room temperature (18-25°C).

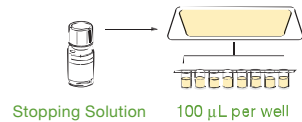
**6** Wash wells 5x with 200 µL of Wash Solution. Remove all liquid before proceeding.

**7** Develop color by adding 100 µL of Substrate to each well.



**8** Incubate wells for 30 ± 5 minutes at room temperature (18-25°C).

**9** Stop color development by adding 100 µL of Stopping Solution to each well.



**10** Read results within one hour with an EIA reader set to 550 nm.

Result Interpretation	
Qualitative Absorbance Ratio	Result Interpretation
< 0.95	Negative
≥ 0.95 to 1.0	Borderline – Repeat Testing Recommended
> 1.0	Positive
Quantitative	
≤ 100 IU/mL	Negative
> 100 IU/mL	Positive

### REFERENCES

1. Rapaport B. *Exp Clin Endocrinol*, 97 No. 2/3, 147-152, 1991.

## Ordering Information

Catalog No.	Description
31025	Bio-Rad Kallestad™ Anti-Thyroglobulin (anti-Tg) ..... 96 tests

### Bio-Rad Autoimmune EIA Kits

Catalog No.	Description
31008	Bio-Rad Kallestad™ Anti-dsDNA .....96 tests
31020	Bio-Rad Kallestad™ Anti-Histone .....96 tests
31021	Bio-Rad Kallestad™ Anti-Mitochondria .....96 tests
31023	Bio-Rad Kallestad™ Anti-PR3 (c-ANCA) .....96 tests
31024	Bio-Rad Kallestad™ Anti-MPO (p-ANCA) .....96 tests
25087	Bio-Rad Kallestad™ Anti-TPO .....96 tests



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For further information, please contact the Bio-Rad office nearest you or visit our website at [www.bio-rad.com](http://www.bio-rad.com).

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