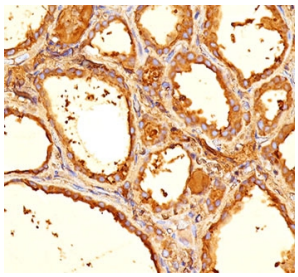
Thyroglobulin Antibody / TG Thyroid Tumor Marker Antibody [clone 6E1.] (V2263)

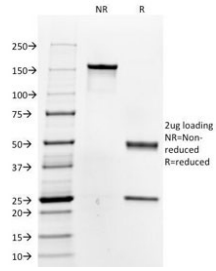
Catalog No.	Formulation	Size
V2263-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V2263-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V2263SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V2263IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

Bulk quote request

Species Reactivity	Human, Mouse, Rat
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	6E1.
Purity	Protein G affinity chromatography
Buffer	1X PBS, pH 7.4
Gene ID	7038
Localization	Cytoplasmic and secreted
Applications	ELISA : 2-4ug/ml (order BSA/azide-free format) Immunohistochemistry (FFPE) : 0.1-0.2ug/ml for 30 min at RT
Limitations	This **Thyroglobulin antibody** is available for research use only.



Thyroglobulin Antibody / TG Thyroid Tumor Marker Antibody. Immunohistochemistry analysis of Thyroglobulin using Thyroglobulin antibody (clone 6E1) in FFPE human thyroid tissue section. HRP-DAB brown chromogenic staining highlights strong cytoplasmic signal in thyroid follicular epithelial cells forming well defined follicular structures, with prominent staining of luminal colloid material reflecting abundant secreted Thyroglobulin. The staining pattern supports the use of Thyroglobulin as a thyroid tumor marker and marker of thyroid follicular epithelial differentiation, commonly used to identify thyroid-derived tumors and evaluate thyroid carcinoma biology.



SDS-PAGE Analysis of Purified, BSA-Free Thyroglobulin Antibody (clone 6E1). Confirmation of Integrity and Purity of the Antibody.

Description

Thyroglobulin (TG) is a large secreted glycoprotein produced by thyroid follicular epithelial cells and stored in the lumen of thyroid follicles where it functions as the precursor for thyroid hormone synthesis. The TG gene located on chromosome 8q24 encodes a highly glycosylated protein that undergoes complex post-translational modification during thyroid hormone production. Because thyroglobulin expression is largely restricted to thyroid follicular epithelial cells, TG serves as an important marker of thyroid tissue origin and thyroid tumor lineage. Thyroglobulin Antibody is therefore widely used to detect TG protein in studies evaluating thyroid tumors and thyroid-derived tissues.

In thyroid pathology research, Thyroglobulin is widely recognized as a thyroid tumor marker associated with differentiated thyroid epithelial cells. Detection of Thyroglobulin protein is frequently used to investigate thyroid epithelial differentiation and tumor biology. Because TG production reflects the functional state of thyroid follicular epithelial cells, detection of TG expression can provide insight into thyroid tumor differentiation status. Thyroglobulin Antibody therefore allows researchers to examine TG protein expression patterns in thyroid-derived tumors and experimental models studying thyroid carcinoma biology.

Thyroglobulin expression is strongly associated with differentiated thyroid epithelial cells, and many well differentiated thyroid tumors retain the ability to produce and secrete TG protein. As a result, detection of Thyroglobulin serves as an informative tumor marker when studying thyroid cancers derived from follicular epithelial cells. Antibodies targeting TG are widely used in studies examining thyroid tumor development, thyroid epithelial differentiation, and endocrine signaling pathways regulating thyroid tumor biology.

Changes in Thyroglobulin expression may occur as thyroid tumors progress toward less differentiated states. Reduced TG expression can reflect loss of follicular epithelial identity during tumor progression. Detection of TG protein using Thyroglobulin Antibody therefore supports investigations of thyroid tumor differentiation, thyroid carcinoma biology, and molecular mechanisms regulating thyroid epithelial cell function.

Application Notes

The concentration stated for each application is a general starting point. Variations in protocols, secondaries and substrates may require the Thyroglobulin Antibody / TG Thyroid Tumor Marker Antibody to be titered up or down for optimal performance.

1. Staining of formalin-fixed tissues requires boiling tissue sections in pH 9 10mM Tris with 1mM EDTA for 10-20 min followed by cooling at RT for 20 minutes.

2. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.

Immunogen

Human thyroid follicular cells were used as the immunogen for this Thyroglobulin antibody.

Storage

Store the Thyroglobulin antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

Alternate Names

TG antibody, Thyroglobulin protein antibody, Thyroid tumor marker antibody, Thyroid carcinoma marker antibody

References (2)

Copyright © NSJ Bioreagents. All rights reserved.