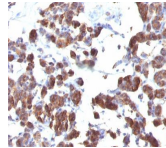


Thyroglobulin Monoclonal Mouse Antibody (TGB04 + TGB05)



Product Description

Thyroglobulin is a 660 kDa dimeric pre-protein with multiple glycosylation sites. It is produced by and processed within the thyroid gland to produce the hormone thyroxine and triiodothyronine. Prior to forming dimers, thyroglobulin monomers undergo conformational maturation in the endoplasmic reticulum. The vast majority of follicular carcinomas of the thyroid will give positive immunoreactivity for anti-thyroglobulin even though sometimes only focally. Poorly differentiated carcinomas of the thyroid are frequently anti-thyroglobulin negative. Adenocarcinomas of other-than-thyroid origin do not react with this antibody. This antibody is useful in identification of thyroid carcinoma of the papillary and follicular types. Presence of thyroglobulin in metastatic lesions establishes the thyroid origin of tumor. Anti-thyroglobulin, combined with anti-calcitonin, can identify medullary carcinomas of the thyroid. Furthermore, anti-thyroglobulin, combined with anti-TTF1, can be a reliable marker to differentiate between primary thyroid and lung neoplasms. Primary antibodies are available purified, or with a selection of fluorescent CF® dyes and other labels. CF® dyes offer exceptional brightness and photostability. See the [CF® Dye Brochure](#) for more information. Note: Conjugates of blue fluorescent dyes like CF®405S and CF®405M are not recommended for detecting low abundance targets, because blue dyes have lower fluorescence and can give higher non-specific background than other dye colors. **Stock status:** Because Biotium offers a large number of antibody and conjugation options, primary antibody conjugates may be made to order. Typical lead times are up to one week for CF® dye and biotin conjugates, and up to 2-3 weeks for fluorescent protein and enzyme conjugates. Please email order@biotium.com to inquire about stock status and lead times before placing your order. **Catalog number key for antibody number 1227, Anti-Thyroglobulin (TGB04 TGB05)**

Product attributes

| | |
|---------------------------------------|--|
| Antibody number | #1227 |
| Antibody reactivity (target) | Thyroglobulin |
| Antibody type | Primary |
| Host species | Mouse |
| Clonality | Monoclonal |
| Clone | TGB04 + TGB05 |
| Isotype | IgG's |
| Molecular weight | 660 kDa (Dimeric Form) |
| Synonyms | AITD3; hTG; TDH3; Tg; Tgn |
| Human gene symbol | TG |
| Entrez gene ID | 7038 |
| SwissProt | P01266 |
| Unigene | 654591 |
| Immunogen | Human thyroid follicular cells |
| Antibody target cellular localization | Secreted (extracellular) |
| Verified antibody applications | IHC (FFPE) (verified) |
| Species reactivity | Human, Mouse, Rat |
| Antibody application notes | Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody. Immunohistochemistry formalin-fixed 0.1-0.2 ug/mL. Staining of formalin-fixed tissues requires boiling tissue sections in 10 mM citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes. Flow Cytometry 0.5-1.0 ug/million cells in 0.1 mL. Optimal dilution for a specific application should be determined by user |
| Positive control | Thyroid |
| Shipping condition | Room temperature |
| Storage Conditions | Store at 2 to 8 °C. Protect fluorescent conjugates from light. Note: store BSA-free antibodies at -10 to -35 °C |
| Shelf life | Guaranteed for at least 24 months from date of receipt when stored as recommended |
| Regulatory status | For research use only (RUO) |
| Antibody/conjugate formulation | Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide, Purified, BSA-free: 1 mg/mL in PBS without azide |
| Antibody research areas | Cancer |
| Cell/tissue expression | Thyroid |
| Tumor expression | Thyroid cancer |

| Antibody # prefix | Conjugation | Ex/Em (nm) | Laser line | Detection channel | Dye Features |
|-------------------|--------------------|------------|------------|--------------------------|----------------------------------|
| BNC04 | CF®405S | 404/431 | 405 | DAPI (microscopy), AF405 | CF®405S Features |
| BNC88 | CF®488A | 490/515 | 488 | GFP, FITC | CF®488A Features |
| BNC68 | CF®568 | 562/583 | 532, 561 | RFP, TRITC | CF®568 Features |
| BNC94 | CF®594 | 593/614 | 561 | Texas Red® | CF®594 Features |
| BNC40 | CF®640R | 642/662 | 633-640 | Cy®5 | CF®640R Features |
| BNC47 | CF®647 | 650/665 | 633-640 | Cy®5 | CF®647 Features |
| BNCB | Biotin | N/A | N/A | N/A | |
| BNUB | Purified | N/A | N/A | N/A | |
| BNUM | Purified, BSA-free | N/A | N/A | N/A | |

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