

DESCRIPTION

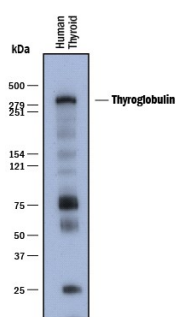
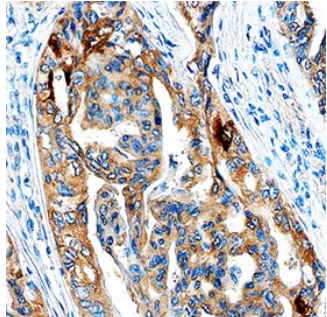
Species Reactivity	Human
Specificity	Detects human Thyroglobulin in direct ELISAs.
Source	Monoclonal Mouse IgG ₁ Clone # 904802
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant human Thyroglobulin Met1-Lys2768 Accession # P01266
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Western Blot	1 µg/mL	See Below
Immunohistochemistry	8-25 µg/mL	See Below

DATA

<p>Western Blot</p>  <p>Detection of Human Thyroglobulin by Western Blot. Western blot shows lysates of human thyroid tissue. PVDF membrane was probed with 1 µg/mL of Mouse Anti-Human Thyroglobulin Monoclonal Antibody (Catalog # MAB8306) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF018). A specific band was detected for Thyroglobulin at approximately 300 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.</p>	<p>Immunohistochemistry</p>  <p>Thyroglobulin in Human Thyroid Cancer Tissue. Thyroglobulin was detected in immersion fixed paraffin-embedded sections of human thyroid cancer tissue using Mouse Anti-Human Thyroglobulin Monoclonal Antibody (Catalog # MAB8306) at 15 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Rabbit HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS005) and counterstained with hematoxylin (blue). Specific staining was localized to epithelial cells. View our protocol for Chromogenic IHC Staining of Paraffin-embedded Tissue Sections.</p>
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PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> 12 months from date of receipt, -20 to -70 °C as supplied. 1 month, 2 to 8 °C under sterile conditions after reconstitution. 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Human Thyroglobulin (Tg) gene is localized at position 8q242-8q243. The gene covers a genome area of at least 300 000 bp and contains at least 37 exons. Thyroglobulin (Tg) is a dimeric 660 kDa glycoprotein produced by follicular cells (thyrocytes) in thyroid gland and stored in the follicular colloid of the gland. Tg is heterogenic due to post-translational modifications, such as iodination, glycosylation, sulfatation, phosphorylation and it is highly sensitivity to proteolysis. Acting as a substrate, Tg is used for the synthesis of thyroid hormones thyroxine (T4) and triiodothyronine (T3). Tg level can serve as a tumor marker of papillary and follicular thyroid cancer and elevated levels of anti-Tg antibodies in blood can be indicative of Graves disease.