

# Anti-Thyroid Peroxidase/TPO antibody [EPR5380] ab109383

リコンビナント **RabMAb**

**1 Abreviews** **8 References** **画像数 5**

### 製品の概要

製品名	Anti-Thyroid Peroxidase/TPO antibody [EPR5380]
製品の詳細	Rabbit monoclonal [EPR5380] to Thyroid Peroxidase/TPO
由来種	Rabbit
アプリケーション	<b>適用あり:</b> mIHC, WB, IP, IHC-P
種交差性	<b>交差種:</b> Human
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
ポジティブ・コントロール	WB: Human thyroid lysate IHC-P: Human thyroid gland tissue IP: Human thyroid cell lysate mIHC: Human thyroid gland tissue.
特記事項	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> <li>- Animal-free production</li> </ul> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a>.</p> <p>Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.</p>

### 製品の特性

製品の状態	Liquid
保存方法	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
バッファー	<p>pH: 7.20</p> <p>Preservative: 0.05% Sodium azide</p> <p>Constituents: 0.1% BSA, 40% Glycerol (glycerin, glycerine), 9.85% Tris glycine, 50% Tissue culture supernatant</p>
精製度	Protein A purified
ポリ/モノ	モノクローナル

クローン名	EPR5380
アイソタイプ	IgG

#### アプリケーション

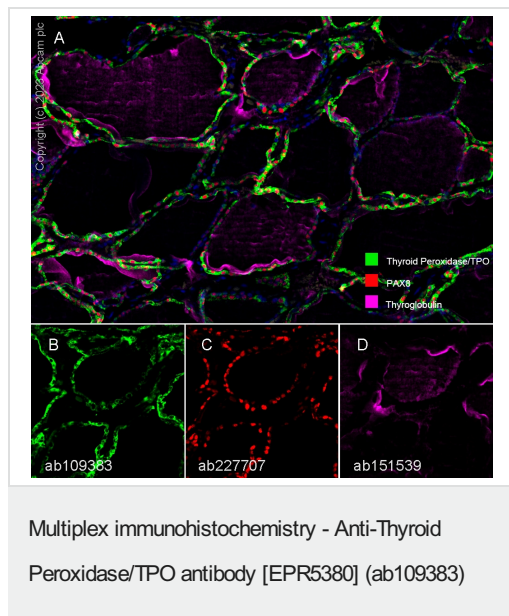
**The Abpromise guarantee** Abpromise保証は、 次のテスト済みアプリケーションにおけるab109383の使用に適用されます  
アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
mlHC		1/1500.
WB		1/1000 - 1/10000. Predicted molecular weight: 103 kDa.
IP		1/10 - 1/100.
IHC-P		1/100 - 1/250. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. Heat up to 98 degrees C, below boiling, and then let cool for 10-20 min.

#### ターゲット情報

機能	Iodination and coupling of the hormonogenic tyrosines in thyroglobulin to yield the thyroid hormones T(3) and T(4).
パスウェイ	Hormone biosynthesis; thyroid hormone biosynthesis.
関連疾患	Note=An alternative splicing in the thyroperoxidase mRNA can cause Graves' disease. Defects in TPO are the cause of congenital hypothyroidism due to dyshormonogenesis type 2A (CHDH2A) [MIM:274500]; also called genetic defect in thyroid hormonogenesis 2A or thyroid hormone organification defect II. CHDH2A is due to defective conversion of accumulated iodide to organically bound iodine. The iodide organification defect can be partial or complete.
配列類似性	Belongs to the peroxidase family. XPO subfamily. Contains 1 EGF-like domain. Contains 1 Sushi (CCP/SCR) domain.
翻訳後修飾	Glycosylated. Heme is covalently bound through a H(2)O(2)-dependent autocatalytic process. Heme insertion is important for the delivery of protein at the cell surface. Cleaved in its N-terminal part.
細胞内局在	Membrane and Cell surface.

#### 画像



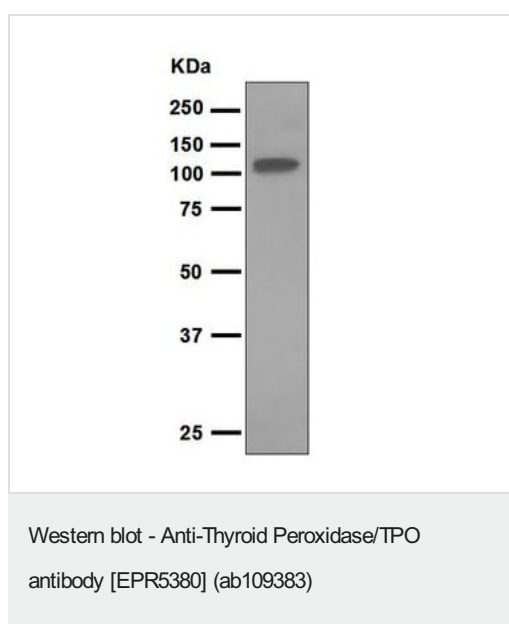
Fluorescence multiplex immunohistochemical analysis of Human thyroid gland tissue (Formalin/PFA-fixed paraffin-embedded sections).

Panel A: merged staining of anti-Thyroglobulin (**ab151539**, magenta; Opal™690), anti-Thyroid Peroxidase/TPO (ab109383, green; Opal™520) and anti-PAX8 (**ab227707**, red; Opal™570) on human thyroid gland. Panel B: anti-Thyroid Peroxidase/TPO stained on cytoplasm of follicular epithelial cells. Panel C: anti-PAX8 stained on nucleus of follicular epithelial cells. Panel D: anti-Thyroglobulin stained on colloid. Opal Polymer HRP Ms + Rb was used as a secondary antibody.

The section was incubated in three rounds of staining: in the order of **ab151539** at 1/5000 dilution (0.167 µg/ml), ab109383 at 1/1500 dilution (0.072 µg/ml) , and **ab227707** at 1/200 dilution (5.22 µg/ml) for 30 mins at room temperature. Each round was followed by a separate fluorescent tyramide signal amplification system.

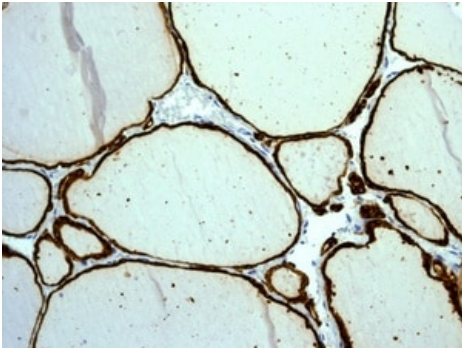
The immunostaining was performed on a Leica Biosystems BOND® RX instrument with an Opal™ 4-color kit. Image acquisition was performed with Leica SP8 confocal microscope. DAPI (blue) was used as a nuclear counter stain.

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins.



Anti-Thyroid Peroxidase/TPO antibody [EPR5380] (ab109383) at 1/1000 dilution + Human thyroid lysate at 10 µg

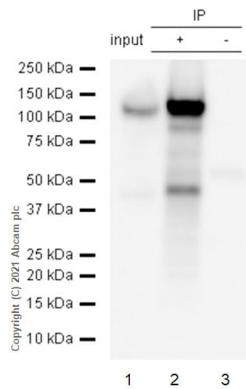
**Predicted band size:** 103 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Thyroid Peroxidase/TPO antibody [EPR5380] (ab109383)

ab109383, at a 1/100 dilution, staining Thyroid Peroxidase/TPO in paraffin-embedded Human thyroid gland tissue

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Immunoprecipitation - Anti-Thyroid Peroxidase/TPO antibody [EPR5380] (ab109383)

Thyroid Peroxidase/TPO was immunoprecipitated from 0.35 mg Human thyroid whole cell lysate 10 µg with 109383 at 1/100 dilution (2µg). VeriBlot for IP Detection Reagent (HRP)([ab131366](#)) was used at 1/5000 dilution.

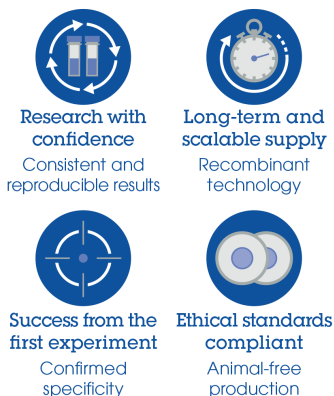
**Lane 1:** Human thyroid whole cell lysate 10 µg

**Lane 2:** ab109383 IP in Human thyroid whole cell lysate

**Lane 3:** Rabbit monoclonal IgG ([ab172730](#)) instead of ab109383 in Human thyroid whole cell lysate

Blocking and dilution buffer and concentration: 5% NFDM/TBST.

### Why choose a recombinant antibody?



Anti-Thyroid Peroxidase/TPO antibody [EPR5380] (ab109383)

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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