

Mouse Anti-TPO/Thyroid Peroxidase [EP159]: RM0189

Intended Use: For Research Use Only

Description: Thyroid Peroxidase (TPO) is a membrane-bound protein, catalyzing iodide oxidation, iodination of tyrosine residues and generation of triiodothyronine and thyroxine. It is first synthesized within the endoplasmic reticulum (ER), where it can be readily detected. After folding to the native state within the ER, intracellular transport of TPO to the cell surface occurs via the Golgi complex, a compartment typically associated with N-glycan processing of many cell surface glycoproteins. TPO labels normal thyroid epithelial cells and thyroid tumor cells. The expression level in thyroid carcinomas is lower than that of normal and benign thyroid tumors.

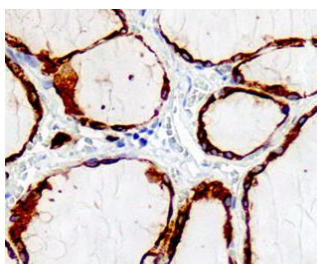
Specifications

Clone: EP159
 Source: Rabbit
 Isotype: IgG
 Reactivity: Human
 Localization: Cytoplasm
 Formulation: Antibody in PBS pH7.4, containing BSA and ≤ 0.09% sodium azide (NaN₃)
 Storage: Store at 2°- 8°C
 Applications: IHC
 Package:

| Description | Catalog No. | Size |
|-------------------------------------|-------------|------|
| TPO/Thyroid Peroxidase Concentrated | RM0189 | 1 ml |

IHC Procedure

Positive Control Tissue: Thyroid, thyroid cancer
 Concentrated Dilution: 50-200
 Pretreatment: Citrate pH6.0 or EDTA pH8.0, 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°-99°C
 Incubation Time and Temp: 30-60 minutes @ RT
 Detection: Refer to the detection system manual
 * Result should be confirmed by an established diagnostic procedure.



FFPE human thyroid stained with anti-TPO using DAB

References:

1. Estrogen and thyroid cancer is a stem affair: A preliminary study. Zane M, *et al. Biomed Pharmacother* 85:399-411, 2017.
2. Expression of thyrotropin receptor, thyroglobulin, sodium-iodide symporter, and thyroperoxidase by fibrocytes depends on AIRE. Fernando R, *et al. Clin Endocrinol Metab* 99:E1236-44, 2014.
3. Muscle cells enhance resistance to pro-inflammatory cytokine-induced cartilage destruction. Cairns DM, *et al. Biochem Biophys Res Commun* 392:22-8, 2010.
4. The role of muscle cells in regulating cartilage matrix production. Cairns DM, *et al. J Orthop Res* 28:529-36, 2010.

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Rev. A

