



Mouse Anti-Human Thyroid peroxidase monoclonal antibody, clone NN28 (CABT-ZB552)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

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| Specificity | It reacts with Human Thyroid peroxidase |
| Target | TPO |
| Immunogen | Recombinant Human Thyroid peroxidase/TPO Protein |
| Isotype | IgG |
| Source/Host | Mouse |
| Species Reactivity | Human |
| Clone | NN28 |
| Purification | Protein A purified |
| Conjugate | Unconjugated |
| Applications | ELISA(cap), IHC-P We recommend the following for sandwich ELISA (Capture - Detection): CABT-ZB552 - CABT-ZB914 This antibody will detect Thyroid peroxidase in antibody pair set. [ABPR-ZB128] |
| Preparation | This antibody was produced from a hybridoma resulting from the fusion of a mouse myeloma with B cells obtained from a mouse immunized with purified, recombinant Human Thyroid peroxidase / TPO. The IgG fraction of the cell culture supernatant was purified by Protein A affinity chromatography. |
| Format | Purified, Liquid |

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| Concentration | Lot specific |
| Size | 50 µL, 100 µL, 200 µL |
| Buffer | PBS |
| Preservative | None |
| Storage | This antibody can be stored at 2°C-8°C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20°C to -80°C. Preservative-Free. Avoid repeated freeze-thaw cycles. |
| Ship | Wet ice |

BACKGROUND

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| Introduction | Thyroid peroxidase is a membrane-bound glycoprotein which belongs to the peroxidase family, XPO subfamily. It contains 1 EGF-like domain and 1 Sushi (CCP/SCR) domain. Thyroid Peroxidase represents one of the main autoantigenic targets in autoimmune thyroid disease of humans. It used to be taken as the formerly so-called `microsomal antigen` several years ago. As an integral membrane glycoprotein it is restricted to the apical plasma membrane of the follicular epithelial cells and comprises two identical subunits of approx 100 kDa molecular weight. Thyroid peroxidase is an enzyme expressed abundantly in the thyroid that liberates iodine for addition onto tyrosine residues on thyroglobulin for the production of thyroxine or triiodothyronine, thyroid hormones. Thyroid peroxidase plays a key role in the thyroid hormone biosynthesis by catalysing both the iodination of tyrosyl residues and the coupling of iodotyrosyl residues in thyroglobulin to form precursors of the thyroid hormones T4 and T3. |
| Keywords | TPO; thyroid peroxidase; MSA; TPX |

GENE INFORMATION

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| Synonyms | TPO; thyroid peroxidase; MSA; TPX; TDH2A; thyroperoxidase; thyroid microsomal antigen |
| Entrez Gene ID | 7173 |
| UniProt ID | P40225 |