

#### **TPO Antibody (monoclonal) (M08)**

Mouse monoclonal antibody raised against a partial recombinant TPO. Catalog # AT4322a

#### Specification

### **TPO Antibody (monoclonal) (M08) - Product Information**

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW WB, E <u>P07202</u> <u>NM\_000547</u> Human mouse Monoclonal IgG2b Kappa 102963

#### TPO Antibody (monoclonal) (M08) - Additional Information

Gene ID 7173

Other Names Thyroid peroxidase, TPO, TPO

**Target/Specificity** TPO (NP\_000538.3, 672 a.a. ~ 779 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.

**Dilution** WB~~1:500~1000 E~~N/A

**Format** Clear, colorless solution in phosphate buffered saline, pH 7.2 .

**Storage** Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

**Precautions** TPO Antibody (monoclonal) (M08) is for research use only and not for use in diagnostic or therapeutic procedures.

## TPO Antibody (monoclonal) (M08) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot



- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

TPO Antibody (monoclonal) (M08) - Images



Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (37.62 KDa) .



Western Blot analysis of TPO expression in transfected 293T cell line by TPO monoclonal antibody (M08), clone 2A11.

Lane 1: TPO transfected lysate(102.9 KDa). Lane 2: Non-transfected lysate.



Detection limit for recombinant GST tagged TPO is approximately 1ng/ml as a capture antibody.

# TPO Antibody (monoclonal) (M08) - Background

This gene encodes a membrane-bound glycoprotein. The encoded protein acts as an enzyme and plays a central role in thyroid gland function. The protein functions in the iodination of tyrosine residues in thyroglobulin and phenoxy-ester formation between pairs of iodinated tyrosines to generate the thyroid hormones, thyroxine and triiodothyronine. Mutations in this gene are associated with several disorders of thyroid hormonogenesis, including congenital hypothyroidism, congenital goiter, and thyroid hormone organification defect IIA. Multiple transcript variants encoding distinct isoforms have been identified for this gene. Additional splice variants have been described but their biological natures have not been determined.

## TPO Antibody (monoclonal) (M08) - References

Personalized smoking cessation: interactions between nicotine dose, dependence and quit-success genotype score. Rose JE, et al. Mol Med, 2010 Jul-Aug. PMID 20379614.New genetic associations detected in a host response study to hepatitis B vaccine. Davila S, et al. Genes Immun, 2010 Apr. PMID 20237496.Lack of a role for cross-reacting anti-thyroid antibodies in chronic idiopathic urticaria. Mozena JD, et al. J Invest Dermatol, 2010 Jul. PMID 20182447.Thyroid peroxidase gene mutations causing congenital hypothyroidism in three Turkish families. Ozbek MN, et al. J Pediatr Endocrinol Metab, 2009 Nov. PMID 20101889.Hemostatic gene polymorphisms in young Sardinian with non-fatal acute myocardial infarction. Musino L, et al. Front Biosci (Elite Ed), 2010 Jan 1. PMID 20036902.