

## TPO Monoclonal Antibody

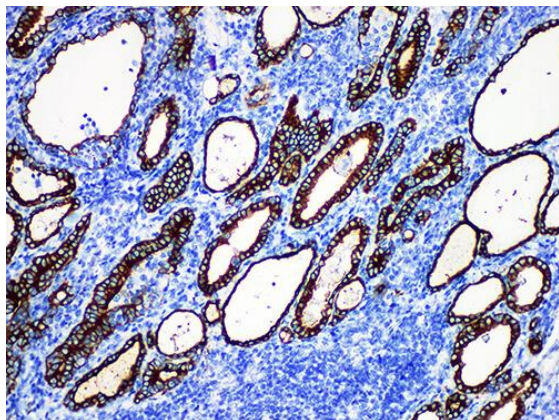
### PRODUCT INFORMATION

<b>Host</b>	Mouse
<b>Cat</b>	PA6102
<b>Application</b>	IHC-P
<b>Reactivity</b>	Human
<b>Sizes</b>	RTU: 1.5mL, 3.0mL, 6.0mL
<b>Localization</b>	Cytoplasm
<b>Product /Lot</b>	Refer to the label

### BACKGROUND

Thyroid peroxidase (TPO) is located on the apical free surface of thyroid epithelial cells. TPO oxidize iodine ions to form iodine atoms, which are added to the tyrosine residues of thyroglobulin to produce thyroxine. It is a key enzyme in thyroid hormone synthesis. TPO is widely expressed in normal thyroid and benign thyroid lesions, and its expression is reduced in thyroid cancer. It can be used to distinguish benign and malignant thyroid tumors, but its specificity and sensitivity are not high.

### IMAGE



Formalin-fixed, paraffin-embedded (FFPE) Human Thyroid carcinoma tissue with TPO Monoclonal Antibody.

### APPLICATION INFORMATION

This product is used for immunohistochemical staining of formalin fixed paraffin embedded or frozen sections. The recommended dilution of concentrated product is 1:50-1:200, and RTU is ready to use. **Repair the antigens in pH9.0 EDTA solution by microwave or high-pressure boiling before incubating the antibodies.** This product is the primary antibody required for immunohistochemistry experiment, which needs to be followed with secondary antibody, DAB kit, hematoxylin staining solution and other reagents. This product is suitable for the immunohistochemistry kits produced by various manufacturers.

### INCUBATION

Incubate at RT (18-30°C) for 60 min or incubate at 4°C for overnight.

### STORAGE AND EXPIRATION

The concentrated antibody should be stored at -20°C protecting from light. It is recommended to sub-pack into several small tubes for the first use. Take one tube each time. Avoid freeze / thaw cycles.

The RTU antibody should be stored at 2-8°C protecting from light (Do not freeze). Please restore at 2-8°C immediately after each time use.

The expiration of this antibody is 12 months. Please follow this manual to store the antibody to avoid badly affecting the titer and effective service life of the product.

### NOTICE

1. The product should be operated by experienced researchers.
2. This product is for Immunohistochemistry use only.
3. The product should be followed by detection kits such as Secondary antibody and DAB kits.
4. Protective measures should be taken to avoid contact with skin and eyes.
5. The product contains sodium azide as an antiseptic. Sodium azide can react with lead or copper to form an explosive metal azide. A large amount of water is used to avoid the formation of metal azides.
6. This product is biological resource, and its treatment should meet the relevant requirements.

### JUDGMENT OF POSITIVE RESULT

The judgment of the immunohistochemical staining results should be observed under the microscope and taken by experienced researchers.

The results of immunohistochemistry should be judged on the basis of tissue positive control and reagent negative control.

Tissue positive control: Tissue section with confirmed antigen, the result should be positive.

Reagent negative control: Use PBS buffer instead of antibody incubation, the

result should be negative.

Positive result (+): It refers to tan or brown staining on specific cells without background staining.

Negative result (-): It refers to no tan or brown staining results in the expected positive tissue cells.

>> Refer to the following

Tissue positive control (+), Reagent negative control (-), Test tissue (+): Indicates the antigen can be detected in the tested tissue.

Tissue positive control (+), Reagent negative control (-), Test tissue (-): Indicates that there is no or less antigen in the tested tissue.

>> Don't refer to the following

Tissue positive control (+), Reagent negative control (+), Test tissue (+)

Tissue positive control (+), Reagent negative control (+), Test tissue (-)

Tissue positive control (-), Reagent negative control (-), Test tissue (+)

Tissue positive control (-), Reagent negative control (+), Test tissue (+)

Tissue positive control (-), Reagent negative control (-), Test tissue (-)

Tissue positive control (-), Reagent negative control (-), Test tissue (+)

### INTERPRETATION OF TEST RESULTS

1. The results of immunohistochemical staining must be established on the basis that the positive control gets a positive result and the negative control gets a negative result. The result of the experiment slice should be positive control (+) or reagent negative (-), or the result should be neglected.
2. The methods and time of antigen repair, incubation time and temperature may affect the test results. Please follow the experiment method strictly.
3. When the tissues are prepared to paraffin sections, please detect the tissue slides within one week to avoid false negative antigens.

### LIMITATIONS OF DETECTION METHODS

Immunohistochemistry is a multi-step experimental process. Improper treatment of each step will affect the final results. Any positive staining results must be evaluated by an experienced researcher and refer to the sample cytomorphology and histopathological background. The value of the test results should also be comprehensively analyzed and judged by the experienced researcher in combination with other test results.

### FOR RESEARCH USE ONLY

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