

## Overview

### Useful For

Identification of parathyroid glands

### Reflex Tests

| Test Id | Reporting Name            | Available Separately | Always Performed |
|---------|---------------------------|----------------------|------------------|
| IHTOI   | IHC Initial, Tech Only    | No                   | No               |
| IHTOA   | IHC Additional, Tech Only | No                   | No               |

### Testing Algorithm

[For the initial technical component only immunohistochemical \(IHC\) stain performed, the appropriate bill-only test ID will be reflexed and charged \(IHTOI\). For each additional technical component only IHC stain performed, an additional bill-only test ID will be reflexed and charged \(IHTOA\).](#)

### Method Name

Immunohistochemistry (IHC)

### NY State Available

Yes

## Specimen

### Specimen Type

TECHONLY

### Ordering Guidance

This test includes only technical performance of the stain (no pathologist interpretation is performed). If diagnostic consultation by a pathologist is required order PATHC / Pathology Consultation.

### Shipping Instructions

Attach the green "Attention Pathology" address label (T498) and the pink Immunostain Technical Only label included in the kit to the outside of the transport container.

### Specimen Required

**Supplies:** Immunostain Technical Only Envelope (T693)

**Specimen Type:** Tissue

**Container/Tube:** Immunostain Technical Only Envelope

**Preferred:** 2 Unstained positively charged glass slide (25- x 75- x 1-mm) per test ordered; sections 4-microns thick

**Acceptable:** Formalin-fixed, paraffin-embedded tissue block

### Digital Image Access

1. Information on accessing digital images of immunohistochemical (IHC) stains and the manual requisition form can be accessed through this website: <https://news.mayocliniclabs.com/pathology/digital-imaging/>
2. Clients ordering stains using a manual requisition form will not have access to digital images.
3. Clients wishing to access digital images must place the order for IHC stains electronically. Information regarding digital imaging can be accessed through this website: <https://news.mayocliniclabs.com/pathology/digital-imaging/#section3>

### Forms

If not ordering electronically, complete, print, and send 1 of the following forms with the specimen:

- [Immunohistochemical \(IHC\)/In Situ Hybridization \(ISH\) Stains Request](#) (T763)
- [Renal Diagnostics Test Request](#) (T830)

### Reject Due To

|  |        |
|--|--------|
| Wet/frozen tissue<br>Cytology smears<br>Nonformalin fixed tissue<br>Nonparaffin embedded tissue<br>Noncharged slides<br>ProbeOn slides | Reject |
|--|--------|

### Specimen Stability Information

| Specimen Type | Temperature         | Time | Special Container |
|---------------|---------------------|------|-------------------|
| TECHONLY      | Ambient (preferred) |      |                   |
|               | Refrigerated        |      |                   |

### Clinical & Interpretive

#### Clinical Information

Parathyroid hormone staining is useful in identifying parathyroid glands in cases of hyperparathyroidism. Hyperproduction of parathyroid-like hormone may occur in association with lung tumors; such tumors may have reactivity with parathyroid hormone antibodies.

#### Interpretation

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This test does not include pathologist interpretation, only technical performance of the stain. If interpretation is required, order PATHC / Pathology Consultation for a full diagnostic evaluation or second opinion of the case.

The positive and negative controls are verified as showing appropriate immunoreactivity. If a control tissue is not included on the slide, a scanned image of the relevant quality control tissue is available upon request; call 855-516-8404.

Interpretation of this test should be performed in the context of the patient's clinical history and other diagnostic tests by a qualified pathologist.

**Cautions**

Age of a cut paraffin section can affect immunoreactivity. Stability thresholds vary widely among published literature and are antigen dependent. Best practice is for paraffin sections to be cut within 6 weeks.

**Clinical Reference**

1. Matsushita H, Usui M, Hara Y, et al. Co-secretion of parathyroid hormone and parathyroid-hormone-related protein via a regulated pathway in human parathyroid adenoma cells. *Am J Pathol.* 1997;150(3):661-871
2. Oka T, Yoshioka T, Shrestha GR, et al. Immunohistochemical study of nodular hyperplastic parathyroid glands in patients with secondary hyperparathyroidism. *Virchows Arch A Pathol Anat Histopathol.* 1988;413(1):53-60
3. Wick MR, Ritter JH, Humphrey PA, Nappi O. Clear cell neoplasms of the endocrine system and thymus. *Semin Diagn Pathol.* 1997;14(3):183-202
4. Sass MR, Wewer Albrechtsen NJ, Pedersen J, et al. Secretion of parathyroid hormone may be coupled to insulin secretion in humans. *Endocr Connect.* 2020;9(7):747-754. doi:10.1530/EC-20-0092
5. Magaki S, Hojat SA, Wei B, So A, Yong WH. An introduction to the performance of immunohistochemistry. *Methods Mol Biol.* 2019;1897:289-298. doi:10.1007/978-1-4939-8935-5\_25

**Performance****Method Description**

Immunohistochemistry on sections of paraffin-embedded tissue.(Unpublished Mayo method)

**PDF Report**

No

**Day(s) Performed**

Monday through Friday

**Report Available**

1 to 3 days

**Specimen Retention Time**

Until staining is complete.

**Performing Laboratory Location**

Rochester

**Fees & Codes****Fees**

- Authorized users can sign in to [Test Prices](#) for detailed fee information.
- Clients without access to Test Prices can contact [Customer Service](#) 24 hours a day, seven days a week.
- Prospective clients should contact their account representative. For assistance, contact [Customer Service](#).

**Test Classification**

This test has been cleared, approved, or is exempt by the US Food and Drug Administration and is used per manufacturer's instructions. Performance characteristics were verified by Mayo Clinic in a manner consistent with CLIA requirements.

**CPT Code Information**

88342-TC, primary

88341-TC, if additional IHC

**LOINC® Information**

| Test ID | Test Order Name                    | Order LOINC® Value   |
|---------|------------------------------------|----------------------|
| PTH     | Parathyroid Hormone IHC, Tech Only | Order only;no result |

| Result ID | Test Result Name                   | Result LOINC® Value  |
|-----------|------------------------------------|----------------------|
| 70856     | Parathyroid Hormone IHC, Tech Only | Bill only; no result |