

Collagen IV Immunostain, Technical Component Only

## **Overview**

### **Useful For**

A marker of the basal lamina of capillaries and basement membranes in all organs

### **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) label and the pink Immunostain Technical Only label included in the kit to the outside of the transport container.

# **Specimen Required**

**Specimen Type:** Tissue

**Supplies:** Immunostain Technical Only Envelope (T693) **Container/Tube:** Immunostain Technical Only Envelope

**Preferred:** 



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Formalin-fixed, paraffin-embedded tissue block

OR

2 Unstained, positively charged glass slides (25- x 75- x 1-mm) per test ordered; sections 4-microns thick

Acceptable: None

## **Digital Image Access**

- 1. Information on accessing digital images of immunohistochemical (IHC) stains and the manual requisition form can be accessed through this website: <a href="https://news.mayocliniclabs.com/ihc-stains/">https://news.mayocliniclabs.com/ihc-stains/</a>
- 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: <a href="https://news.mayocliniclabs.com/ihc-stains/#FAQ">https://news.mayocliniclabs.com/ihc-stains/#FAQ</a>

### **Forms**

If not ordering electronically, complete, print, and send a <u>Immunohistochemical (IHC)/In Situ Hybridization (ISH) Stains</u>
<u>Request</u> (T763) with the specimen.

# Reject Due To

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

# **Specimen Stability Information**

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

# **Clinical & Interpretive**

## **Clinical Information**

Collagen IV stains the basal lamina of capillaries as well as basement membrane structures in all organs. In the kidney,



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the antibody stains the glomerular and tubular basement membranes and mesangial cells and matrix within the glomerulus.

## Interpretation

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.

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.

The charge of glass slides can be affected by environmental factors and subsequently may alter slide staining. Sending unsuitable glass slides can result in inconsistent staining due to poor slide surface chemistry.

Best practices for storage of positively charged slides:

- -Minimize time slides are stored after being unpackaged
- -Limit exposure to high humidity and heat
- -Minimize exposure to plastics

## **Clinical Reference**

- 1. Abreu-Velez AM, Howard MS. Collagen IV in normal skin and in pathological processes. N Am J Med Sci. 2012 Jan;4(1):1-8
- 2. Agarwal P, Ballabh R. Expression of type IV collagen in different histological grades of oral squamous cell carcinoma: an immunohistochemical study. J Cancer Res Ther. 2013;9(2):272-275
- 3. Girolamo F, Errede M, Longo G, et al. Defining the role of NG2-expressing cells in experimental models of multiple sclerosis. A biofunctional analysis of the neurovascular unit in wild type and NG2 null mice. PLoS One. 2019;14(3):e0213508. doi:10.1371/journal.pone.0213508
- 4. 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



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## Day(s) Performed

Monday through Friday

## **Report Available**

1 to 3 days

### **Specimen Retention Time**

Until staining is complete.

# **Performing Laboratory Location**

Mayo Clinic Laboratories - Rochester Main Campus

### **Fees & Codes**

### **Fees**

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

### **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   |
|---------|----------------------------|----------------------|
| COLIV   | Collagen IV IHC, Tech Only | Order only;no result |

| Result ID | Test Result Name           | Result LOINC® Value  |
|-----------|----------------------------|----------------------|
| 70721     | Collagen IV IHC, Tech Only | Bill only; no result |