

# Prostate Specific Antigen (PSA) Immunostain, Technical Component Only

### Overview

#### Useful For

Marker of glandular epithelium in normal and neoplastic prostate

#### **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**

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: <u>https://news.mayocliniclabs.com/pathology/digital-imaging/</u>

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: <u>https://news.mayocliniclabs.com/pathology/digital-imaging/#section3</u>

### 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**

Prostate specific antigen is present within the cytoplasm of glandular epithelium in normal prostate, as well as in prostate cancer. It is useful diagnostically for identification of adenocarcinoma of the prostate in metastatic sites and for



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differentiating prostatic adenocarcinoma from urothelial carcinoma.

#### 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. Aihara M, Lebovitz RM, Wheeler TM, et al. Prostate specific antigen and gleason grade: an immunohistochemical study of prostate cancer. J Urol. 1004;151(6):1558-1564

2. Bostwick DG. Prostate-specific antigen. Current role in diagnostic pathology of prostate cancer. Am J Clin Pathol. 1994;102(4 Suppl 1):S31-S37

3. Hameed O, Humphrey PA. Immunohistochemistry in diagnostic surgical pathology of the prostate. Semin Diagn Pathol. 2005;22(1):88-104

4. Hammerich KH, Ayala GE, Wheeler TM. Application of immunohistochemistry to the genitourinary system (prostate, urinary bladder, testis, and kidney). Arch Pathol Lab Med. 2008;132:432-440

5. Varma M, Berney DM, Rhodes A. Technical variations in prostatic immunohistochemistry: need for standardisation and stringent quality assurance in PSA and PSAP immunostaining. J Clin Pathol. 2004;57:687-690

6. 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



# Prostate Specific Antigen (PSA) Immunostain, Technical Component Only

No

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<sup>®</sup> Information

70855

Test ID	Test Order Name	Order LOINC <sup>®</sup> Value
PSAIM	Prostate Spec Ag IHC, Tech Only	Order only;no result
Result ID	Test Result Name	Result LOINC <sup>®</sup> Value

Prostate Spec Ag IHC, Tech Only

Bill only; no result