

## Overview

**Useful For**

Detection of human papillomavirus from low-risk genotypes (6, 11)

**Method Name**

In Situ Hybridization (ISH)

**NY State Available**

Yes

## Specimen

**Specimen Type**

Special

**Shipping Instructions**

Attach the green "Attention Pathology" address label (T498) to the outside of the transport container before putting into the courier mailer.

**Necessary Information**

A pathology/diagnostic report and a brief history are required.

**Specimen Required**

**Supplies:** Pathology Packaging Kit (T554)

**Specimen Type:** Tissue

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

**Collection Instructions:** Formalin-fixed, paraffin-embedded tissue block; or 5 unstained glass, "positively charged" slides with 4-microns, formalin-fixed, paraffin-embedded tissue

**Forms**

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

-[Oncology Test Request](#) (T729)

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

**Reject Due To**

|                                      |        |
|--------------------------------------|--------|
| Wet/frozen tissue<br>Cytology smears | Reject |
|--------------------------------------|--------|

|  |  |
|--|--|
| Nonformalin fixed tissue<br>Nonparaffin embedded tissue<br>Noncharged slides<br>ProbeOn slides |  |
|--|--|

**Specimen Stability Information**

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

**Clinical & Interpretive****Clinical Information**

Human papillomavirus infections with low-risk genotypes (6, 11) can cause benign hyperplasia, such as condylomas and papillomas.

**Reference Values**

Results are reported as positive or negative for types 6 and 11.

**Interpretation**

This test, when not accompanied by a pathology consultation request, will be answered as either positive or negative. If additional interpretation or analysis is needed, request PATHC / Pathology Consultation along with this test.

**Cautions**

Age of a cut paraffin section can affect staining quality. Stability thresholds vary widely among published literature. Best practice is for paraffin sections to be cut within 6 weeks.

**Clinical Reference**

1. Lindemann ML, Dominguez MJ, de Antonio JC, et al. Analytical comparison of the cobas HPV test with hybrid capture 2 for the detection of high-risk HPV genotypes. *J Mol Diagn.* 2012;14(1):65-70
2. Bishop JA, Ma XJ, Wang H, et al. Detection of transcriptionally active high-risk HPV in patients with head and neck squamous cell carcinoma as visualized by a novel E6/E7 mRNA in situ hybridization method. *Am J Surg Pathol.* 2012;36(12):1874-1882
3. Mirghani H, Casiraghi O, Guerlain J, et al. Diagnosis of HPV driven oropharyngeal cancers: Comparing p16 based algorithms with the RNAScope HPV-test. *Oral oncology.* 2016;62:101-108
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**

In situ hybridization on sections of paraffin-embedded tissue.(Unpublished Mayo method)

**PDF Report**

No

**Day(s) Performed**

Monday through Friday

**Report Available**

5 to 7 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 [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 was developed and its performance characteristics determined by Mayo Clinic in a manner consistent with CLIA requirements. It has not been cleared or approved by the US Food and Drug Administration.

**CPT Code Information**

88365-Primary

88364-If additional in situ hybridization

**LOINC® Information**

| Test ID   | Test Order Name  | Order LOINC® Value  |
|-----------|------------------|---------------------|
| HPVLR     | HPV Low-Risk ISH | In Process          |
| Result ID | Test Result Name | Result LOINC® Value |
|           |                  |                     |

|       |                                    |                 |
|-------|------------------------------------|-----------------|
| 71204 | Interpretation                     | 50595-8         |
| 71205 | Participated in the Interpretation | No LOINC Needed |
| 71206 | Report electronically signed by    | 19139-5         |
| 71208 | Material Received                  | 81178-6         |
| 71595 | Disclaimer                         | 62364-5         |
| 72113 | Case Number                        | 80398-1         |