

## Overview

### Useful For

Aids in the identification of respiratory syncytial viral infection

### Reflex Tests

Test Id	Reporting Name	Available Separately	Always Performed
ISTOI	ISH Initial, Tech Only	No	No
ISTOA	ISH Additional, Tech Only	No	No

### Testing Algorithm

For the initial technical component only in situ hybridization (ISH) stain performed, the appropriate bill only test ID will be reflexed and charged (ISTOI). For each additional technical component only ISH stain performed, an additional bill only test ID will be reflexed and charged (ISTOA).

### Method Name

In Situ Hybridization (ISH)

### 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:**

-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:** Formalin-fixed, paraffin-embedded tissue block or 4 unstained positively charged glass slide (25- x 75- x 1-mm) per test ordered; sections 4-microns thick

### Digital Image Access

- 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/>
- Clients ordering stains using a manual requisition form will not have access to digital images.
- 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 an [Immunohistochemical \(IHC\)/In Situ Hybridization \(ISH\) Stains Request](#) (T763) with the specimen.

### Reject Due To

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

### Specimen Stability Information

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

### Clinical & Interpretive

### Clinical Information

---

Respiratory syncytial virus (RSV) causes a wheezing illness that especially affects young children. The virus infects alveolar pneumocytes and induces fusion of multiple cells, creating a "syncytial" multinucleated cell. This RSV probe sequence was designed to identify subgroups RSV-A and RSV-B. It has been verified to not cross react with the following viruses in formalin-fixed, paraffin-embedded tissue: adenovirus, BK virus, cytomegalovirus, Epstein-Barr virus, hepatitis C virus, human herpes virus, type 8, human papillomavirus types 6, 11, 16, E6/E7, *Helicobacter pylori*, herpes simplex virus types 1 and 2, JC virus, parvovirus, toxoplasma, and varicella-zoster viruses.

**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. 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.

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. Hall CB. Respiratory syncytial virus and parainfluenza virus. *N Engl J Med*. 2001;344(25):1917-1928
2. Essaidi-Laziosi M, Lyon M, Mamin A, Fernandes Rocha M, Kaiser L, Tapparel C. A new real-time RT-qPCR assay for the detection, subtyping and quantification of human respiratory syncytial viruses positive- and negative-sense RNAs. *J Virol Methods*. 2016;235:9-14
3. User manual: RNAscope 2.5 VS Assay for Ventana DISCOVER ULTRA System BROWN, Document Number 322200-USM\_ULT
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**

1 to 3 days

**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 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-TC, Primary

88364-TC, if additional ISH

**LOINC® Information**

Test ID	Test Order Name	Order LOINC® Value
RSVAB	Resp Syncytial Virus(RSV)ISH,T Only	Order only;no result

Result ID	Test Result Name	Result LOINC® Value
601949	Resp Syncytial Virus(RSV)ISH,T Only	Bill only; no result