Test Definition: HG34W
Histone 3.3 G34W (H3F3A G34W)
Immunostain, Technical Component Only

Overview

Useful For
Aiding in the diagnosis of giant cell tumor of bone

Reflex Tests

<table>
<thead>
<tr>
<th>Test Id</th>
<th>Reporting Name</th>
<th>Available Separately</th>
<th>Always Performed</th>
</tr>
</thead>
<tbody>
<tr>
<td>IHTOI</td>
<td>IHC Initial, Tech Only</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>IHTOA</td>
<td>IHC Additional, Tech Only</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

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.

Mayo Clinic Laboratories has multiple histone immunostains available. See table for ordering guidance.

<table>
<thead>
<tr>
<th>Test ID</th>
<th>Published name</th>
<th>Indication</th>
<th>Mayo Clinic slide label</th>
</tr>
</thead>
<tbody>
<tr>
<td>HG34W</td>
<td>Histone 3.3 G34W (H3F3A G34W) Immunostain, Technical Component Only</td>
<td>Giant cell tumor of bone (GCTB)</td>
<td>H3 G34W</td>
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<tr>
<td>HK27M</td>
<td>Histone H3 K27M Mutant (H3 K27M) Immunostain, Technical Component Only</td>
<td>K27M mutant midline gliomas</td>
<td>H3 K27M</td>
</tr>
<tr>
<td>HISME</td>
<td>Histone H3 Trimethyl K27 (H3 K27me[3]) Immunostain, Technical Component Only</td>
<td>MPNST and</td>
<td>H3 K27me3</td>
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</tbody>
</table>
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Histone 3.3 G34W (H3F3A G34W)
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<table>
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<tr>
<th></th>
<th>Immunostain, Technical Component Only</th>
<th>K27M mutant midline gliomas</th>
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<tbody>
<tr>
<td>HK36M</td>
<td>Histone H3 K36M Mutant (H3F3 K36M)</td>
<td>Chondroblastoma</td>
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<tr>
<td></td>
<td>Immunostain, Technical Component Only</td>
<td>H3 K36M</td>
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</table>

**Shipping Instructions**

Attach the green pathology address label 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 (FFPE) tissue block

**Digital Image Access**

Mayo Clinic is preparing to migrate to a new slide scanning solution and will need to temporarily suspend digital imaging for tech-only IHC/ISH orders received after June 17. We will send a follow-up notification by September 1st indicating when digital imaging resumes. We appreciate your patience as we improve our digital imaging solution.

**Forms**

If not ordering electronically, complete, print, and send a 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 | Reject |

**Specimen Stability Information**

<table>
<thead>
<tr>
<th>Specimen Type</th>
<th>Temperature</th>
<th>Time</th>
<th>Special Container</th>
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</thead>
<tbody>
<tr>
<td>TECHONLY</td>
<td>Ambient (preferred)</td>
<td>0 hours</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Refrigerated</td>
<td>0 hours</td>
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</table>

**Clinical & Interpretive**
Clinical Information

**H3F3A** is a member of the histone H3 family and is located on chromosome 1. Histone H3 G34W is expressed in the nuclei of the mononuclear cell population of **H3F3A** altered giant cell tumor of bone (GCTB).

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.

Clinical Reference


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
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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 Regional Manager. 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

<table>
<thead>
<tr>
<th>Test ID</th>
<th>Test Order Name</th>
<th>Order LOINC® Value</th>
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<tbody>
<tr>
<td>HG34W</td>
<td>Histone H3 G34W IHC, Tech Only</td>
<td>Order only; no result</td>
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</tbody>
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<table>
<thead>
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<th>Test Result Name</th>
<th>Result LOINC® Value</th>
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<tbody>
<tr>
<td>604698</td>
<td>Histone H3 G34W IHC, Tech Only</td>
<td>Bill only; no result</td>
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