Overview

Useful For
Determining specimen origin when the patient identity of a specimen is in question

Genetics Test Information
A panel of 24 microsatellite markers that recognize highly variable regions of human DNA is used in a PCR-based assay to compare the genotype for the specimen in question with that determined from DNA isolated from patient specimens of known identity.

Reflex Tests

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<th>Test ID</th>
<th>Reporting Name</th>
<th>Available Separately</th>
<th>Always Performed</th>
</tr>
</thead>
<tbody>
<tr>
<td>_STR1</td>
<td>Comp Analysis using STR (Bill only)</td>
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<td>_STR2</td>
<td>Add'l comp analysis w/STR (Bill Only)</td>
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</table>

Method Name
Polymerase Chain Reaction (PCR)/Microsatellite Markers

NY State Available
Yes

Specimen

Specimen Type
Varies

Advisory Information
Chain of custody documentation is not available. This test is not intended for medico-legal or forensic purposes.

Shipping Instructions
Specimen preferred to arrive within 96 hours of collection.

Necessary Information
1. **Due to the complex nature of this test, direct communication (eg, pathologist to pathologist) is required** to avoid delays in sample processing and ensure an understanding of relevant case details.

2. **A brief letter that includes the following 4 pieces of information is required** for all orders:
   a. Reason for testing, including detailed information regarding what specific comparisons are requested.
   b. Clear identification of the known and unknown specimens.
c. Copies of all existing pathology reports pertaining to submitted issue specimens.

d. Contact information for the ordering physician.

**Specimen Required**

**Patient Preparation:** A previous bone marrow transplant from an allogenic donor will interfere with testing. Call 800-533-1710 for instructions for testing patients who have received a bone marrow transplant.

**Specimen Type:** Whole blood

**Container/Tube:**

**Preferred:** Lavender top (EDTA) or yellow top (ACD)

**Acceptable:** Any anticoagulant

**Specimen Volume:** 3 mL

**Collection Instructions:**

1. Invert several times to mix blood.

2. Send specimen in original tube.

**Specimen Stability Information:** Ambient (preferred)/Refrigerated

**Specimen Type:** Tissue block or slide

**Collection Instructions:**

1. Submit formalin-fixed, paraffin-embedded (FFPE) tissue block (preferred) or 4 to 10 unstained sections (each 5-microns thick) **plus** 1 slide stained with hematoxylin and eosin.

2. The number of unstained sections required depends on the amount of tissue that can be used for analysis.

3. For very small tissue fragments, 10 sections are recommended; for large tissue fragments, 4 sections are generally sufficient.

4. If known and unknown specimens are within the same block, include labeled hematoxylin-and-eosin slide identifying the known and unknown specimens.

5. Specimen ID tests involving very small fragments of tissue, including most floaters, are performed at the discretion of the reviewing pathologist. Cases involving floaters are usually rejected due to an insufficient amount of the floater tissue.

**Specimen Minimum Volume**

**Blood:** 0.5 mL

**Tissue:** see Specimen Required

**Reject Due To**

All specimens will be evaluated by Mayo Clinic Laboratories for test suitability.
Specimen Stability Information

<table>
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<tr>
<th>Specimen Type</th>
<th>Temperature</th>
<th>Time</th>
<th>Special Container</th>
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<tbody>
<tr>
<td>Varies</td>
<td>Varies</td>
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Clinical and Interpretive

Clinical Information
For various reasons, the patient origin for a particular specimen may be questioned. This is especially true for paraffin-embedded material: labeling accuracy may be questioned or tissue from other sources may be included by mistake. Confirmation of the patient origin may be critical to the clinical workup of that patient.

Molecular methods are now available to extract DNA from various sources, including paraffin-embedded material, and to compare the molecular fingerprint (genotype) of one specimen source with another one. Matching genotypes on multiple specimens suggest that they are derived from the same patient, whereas differences in genotype suggest different patient sources.

Interpretation
An interpretive report will be provided.

Cautions
Errors in interpretation of results may occur if information given is inaccurate or incomplete.

Chain-of-custody documentation is not available.

Clinical Reference


Performance

Method Description
A panel of microsatellite markers that recognize highly variable regions of human DNA is used in a PCR-based assay to compare the genotype for the specimen in question with that determined from DNA isolated from patient specimens of known identity. (Unpublished Mayo method)

PDF Report
No

Day(s) and Time(s) Test Performed
Monday, Wednesday; 10 a.m.

Analytic Time
14 days
Test Definition: SPECI
Specimen Source Identification

Maximum Laboratory Time
18 days

Specimen Retention Time
Whole Blood: 2 weeks (if available) Extracted DNA: 3 months

Performing Laboratory Location
Rochester

Fees and 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 was developed and its performance characteristics determined by Mayo Clinic in a manner consistent with CLIA requirements. This test has not been cleared or approved by the U.S. Food and Drug Administration.

CPT Code Information
81265-Comparative analysis using Short Tandem Repeat (STR) markers; patient and comparative specimen (eg, pre-transplant recipient and donor germline testing, post-transplant non-hematopoietic recipient germline [eg, buccal swab or other germline tissue sample] and donor testing, twin zygosity testing or maternal cell contamination of fetal cells

Added as needed:
81266 each additional specimen (eg additional cord blood donor, additional fetal samples from different cultures, or additional zygosity in multiple birth pregnancies)

LOINC® Information

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