## Ordered Items

<table>
<thead>
<tr>
<th>Tests</th>
<th>Result</th>
<th>Flag</th>
<th>Units</th>
<th>Reference Interval</th>
<th>Lab</th>
</tr>
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<tbody>
<tr>
<td>Trofile(R) DNA</td>
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### Trofile(R) DNA Interpretation

Co-receptor tropism is defined as an interaction of a virus with a specific co-receptor on the target cell. To gain entry into CD4+ cells, HIV must bind to the cell surface CD4 receptor and to one of two co-receptors, CCR5 or CXCR4. Trofile DNA is a pseudovirion based tropism assay that uses HIV-1 envelope sequences isolated from cell associated viral DNA taken from whole blood cells infected with HIV. HIV-1 envelopes encoded by the viral DNA are tested in a cell-based viral infectivity assay in order to determine which co-receptor the HIV-1 virus population is capable of using: CCR5, CXCR4 or both, known as D/M (dual/mixed).

#### Methodology

Trofile uses the complete gp160 coding region of the HIV-1 envelope protein ensuring that all of the determinants of tropism are tested.

Subtype is determined based on the HIV-1 gp41 envelope region.

For more information on interpreting this report, please visit [www.MonogramBio.com](http://www.MonogramBio.com) or call Customer Service at 800-777-0177 between the hours of 6:30am to 5:00pm PT Monday through Friday.

This assay meets the standards for performance.
characteristics and all other quality control and assurance requirements established by the Clinical Laboratory Improvement Amendments. The results have been disclosed to you from confidential records protected by law and are not to be disclosed to unauthorized persons. Further disclosure of these results is prohibited without specific consent of the persons to whom it pertains, or as permitted by law.

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<td>01 L9</td>
<td>Monogram Biosciences Inc</td>
<td>Dir: Samuel H Pepkowitz, MD</td>
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</tr>
<tr>
<td></td>
<td>345 Oyster Point Blvd, S San Francisco, CA 94080-1913</td>
<td>For inquiries, the physician may contact Branch: 800-222-7566 Lab: 800-262-7300</td>
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</table>
**Tropotype Result**

**R5**

**D/M**

**X4**

Virus uses CCR5 co-receptors to enter the CD4+ cell.

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**ABOUT TROPISM**

**TROFILE®DNA — A NEW TROPISM ASSAY FROM MONOGRAM BIOSCIENCES**

Trofile DNA meets the US standards for technical validation as established by the Clinical Laboratory Improvement Amendments. Trofile DNA is a single cycle pseudoviron based tropism assay that uses the complete gp160 coding region of HIV-1 to evaluate tropism. Instead of using HIV-1 RNA isolated from patient plasma, Trofile DNA uses cell associated viral DNA taken from whole blood cells infected with HIV. HIV-1 envelopes encoded by the viral DNA are tested in a cell-based viral infectivity assay in order to determine which co-receptor the HIV-1 population is capable of using: CCR5, CXCR4, or both, known as D/M (dual/mixed).

**TROFILE DNA VIRAL CLASSIFICATION**

Co-receptor tropism is defined as an interaction of a virus with a specific co-receptor on the target cell. To gain entry into CD4+ cells, HIV must bind to the cell surface CD4 receptor and to one of two co-receptors, CCR5 and CXCR4. Trofile DNA uses the complete gp160 coding region of the HIV-1 envelope protein ensuring that all of the determinants of tropism tested.

**CCR5 Tropic (R5) HIV-1**

Virus uses CCR5 to enter into CD4+ cells.

**CXCR4 Tropic (X4) HIV-1**

Virus uses CXCR4 to enter into CD4+ cells.

**DUAL/MIXED Tropic (D/M) HIV-1**

Dual-tropic viruses can use either CCR5 or CXCR4 to enter into CD4+ cells. Mixed-tropic populations contain viruses with 2 or more tropisms.

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Trofile uses the complete gp160 coding region of the HIV-1 envelope protein ensuring that all of the determinants of tropism are tested. Subtype is determined based on the HIV-1 gp41 envelope region. This assay meets the standards for performance characteristics and all other quality control and assurance requirements established by the Clinical Laboratory Improvement Amendments. The results have been disclosed to you from confidential records protected by law and are not to be disclosed to unauthorized persons. Further disclosure of these results is prohibited without specific consent of the persons to whom it pertains, or as permitted by law.