INTENDED USE
The HIV-1 Seroconversion Panel PRB970 is a group of serial bleeds from an individual plasma donor during seroconversion. This Panel is intended for use by diagnostics manufacturers and clinical laboratorians to evaluate their HIV-1 test systems using well-characterized specimens, and to provide comprehensive data for comparative analysis. For Research Use Only. Not for use in diagnostic procedures.

PRODUCT DESCRIPTION
PRB970 consists of a set of four undiluted plasma samples from a single plasma donor collected during a period of HIV-1 seroconversion. All units were maintained frozen, except for the interval of dispensing into vials. No preservatives were added.

Cat No. PRB970-1.0 1 vial per member 4 members, 1.0 mL per vial

STORAGE
Panel members should be stored frozen at -65°C to -80°C to preserve HIV-1 RNA. HIV antibody and antigen will be preserved at -10°C or colder. SeraCare recommends that the panel members be divided into smaller aliquots, if appropriate, to avoid multiple freeze-thaw cycles. If turbidity or particulate matter is observed, the samples should be centrifuged in accordance with each test kit manufacturer’s instructions for sample preparation.

INTERPRETATION OF RESULTS
The Data Sheet for HIV-1 Seroconversion Panel PRB970 is available at www.seracarepanels.com. Select PRB970 from the list of panel data sheets. The Data Sheet lists results for panel members generated using commercially available screening, monitoring and confirmatory tests approved in the U.S. and/or the European Union. The tests that are listed were performed at SeraCare or at recognized reference laboratories (RL) by individuals who routinely use these procedures. Information regarding specific test methods is available on the Data Sheet. Data Sheets are updated when new data are available.

LIMITATIONS
PRB970 is offered for research use only. Not for use in diagnostic procedures. Data are provided for informational purposes. SeraCare Life Sciences does not claim that others can duplicate test results exactly.

PRECAUTIONS
These materials have not been treated and should be considered biohazardous. Follow Universal Precautions. Some panel members were found positive by tests for HIV markers including HIV-1 RNA, HIV-1 antigen and anti-HIV. The units that make up this panel were found negative for anti-HCV and HBsAg. This does not ensure the absence of these or other human pathogens. Do not pipette by mouth. Do not smoke, eat, or drink in areas where specimens are handled. These materials should be disposed of in a manner that will inactivate pathogenic agents.

REFERENCES
1. CDC recommendations for prevention of HIV transmission in health care settings. MMWR 36 (supp.2) 1987.

For assistance, contact SeraCare Technical Support at 508.244.6400.

ASK ABOUT RELATED SERACARE PRODUCTS
• ACCURUN® independent quality controls
• SeraCon™ and other processed plasma products
• Global Patient Sample (GPS) Program – access to a vast and evolving inventory of single test patient samples
OVERVIEW

HIV-1 AccuVert™ Seroconversion Panel PRB970 is a 4 member, 1.0 mL per vial panel of undiluted, naturally-occurring plasma samples. Panel members represent serial bleeds collected from a single individual over the course of 14 days during the development of HIV infection and subsequent response.

Test results from commercially available HIV assays are included for characterization of the panel members. This panel of human plasma samples is positive for HIV-1 RNA and p24 antigen and demonstrates a change in expression from negative to positive for HIV antibody during the development and progression of HIV infection.

For Research Use Only. Not for use in diagnostic procedures. Data are provided for informational purposes. SeraCare Life Sciences does not claim that others can duplicate test results exactly.

CAUTION: Potentially infectious materials. Follow Universal Precautions. Some panel members were found positive for anti-HIV-1. All panel members were found negative for HBsAg and anti-HCV.

Expression of HIV-1 Markers During Progression of Infection

This graph demonstrates the development and progression of HIV infection in a single individual utilizing test results for various HIV analytes and analyte combinations. Lines connecting data points are not indicative of marker reactivity between bleed dates.
## HIV RNA (copies/mL)

<table>
<thead>
<tr>
<th>Panel Member</th>
<th>Bleed Date</th>
<th>Days Since 1&lt;sup&gt;st&lt;/sup&gt; Bleed</th>
<th>Fiebig Stage</th>
<th>Abbott HIV RNA m2000</th>
<th>Roche HIV RNA CAP/CTM v1.0</th>
<th>Siemens HIV RNA bDNA</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRB970-01</td>
<td>03-Jun-08</td>
<td>0</td>
<td>II</td>
<td>2.0 x 10&lt;sup&gt;5&lt;/sup&gt;</td>
<td>1.1 x 10&lt;sup&gt;5&lt;/sup&gt;</td>
<td>8.4 x 10&lt;sup&gt;4&lt;/sup&gt;</td>
</tr>
<tr>
<td>PRB970-02</td>
<td>10-Jun-08</td>
<td>7</td>
<td>II</td>
<td>&gt;1.0 x 10&lt;sup&gt;8&lt;/sup&gt;</td>
<td>&gt;1.0 x 10&lt;sup&gt;7&lt;/sup&gt;</td>
<td>&gt;5.0 x 10&lt;sup&gt;8&lt;/sup&gt;</td>
</tr>
<tr>
<td>PRB970-03</td>
<td>13-Jun-08</td>
<td>10</td>
<td>III</td>
<td>3.5 x 10&lt;sup&gt;6&lt;/sup&gt;</td>
<td>2.1 x 10&lt;sup&gt;6&lt;/sup&gt;</td>
<td>&gt;5.0 x 10&lt;sup&gt;6&lt;/sup&gt;</td>
</tr>
<tr>
<td>PRB970-04</td>
<td>17-Jun-08</td>
<td>14</td>
<td>IV</td>
<td>6.6 x 10&lt;sup&gt;4&lt;/sup&gt;</td>
<td>6.4 x 10&lt;sup&gt;4&lt;/sup&gt;</td>
<td>3.4 x 10&lt;sup&gt;4&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

**Test Date**
- 13-May-10
- 19-May-10
- 18-Jun-10

**Test Site**
- RL
- SC
- RL

**Kit Part Code**
- 6L18
- 03542998 190
- 127418 A&B

**Kit Lot No.**
- 422866
- M15645
- D079

**Kit Exp Date**
- 5-May-11
- 31-Jan-11
- 28-Sep-10


RL = Reference Lab; SC = SeraCare

## HIV Antigen

<table>
<thead>
<tr>
<th>Panel Member</th>
<th>Bleed Date</th>
<th>Days Since 1&lt;sup&gt;st&lt;/sup&gt; Bleed</th>
<th>Perkin Elmer HIVAg p24 (s/co)&lt;sup&gt;1&lt;/sup&gt;</th>
<th>Zeptometrix HIVAg p24 (s/co)&lt;sup&gt;1&lt;/sup&gt;</th>
<th>bioMerieux HIVAg VIDAS p24 (pg/mL)&lt;sup&gt;2&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRB970-01</td>
<td>03-Jun-08</td>
<td>0</td>
<td>1.6</td>
<td>3.3</td>
<td>13.0</td>
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<td>PRB970-02</td>
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<td>7</td>
<td>172.2</td>
<td>67.4</td>
<td>&gt;400.0</td>
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<td>PRB970-03</td>
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<td>27.8</td>
<td>38.1</td>
<td>299.6</td>
</tr>
<tr>
<td>PRB970-04</td>
<td>17-Jun-08</td>
<td>14</td>
<td>1.4</td>
<td>1.3</td>
<td>9.3</td>
</tr>
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</table>

**Test Date**
- 07-Apr-14
- 25-May-10
- 30-Jun-10

**Test Site**
- SC
- SC
- RL

**Kit Part Code**
- NEK050A
- 801111
- 30 117

**Kit Lot No.**
- 990-13514
- 306346
- 838404801

**Kit Exp Date**
- 01-Oct-14
- 12-Mar-11
- 17-Oct-10

<sup>1</sup>Immunoassay results are means of duplicates expressed as signal to cutoff ratios (s/co). Ratios ≥ 1.0 are considered reactive and noted in red.

<sup>2</sup>Quantitative HIV Antigen results are means of duplicates expressed in pg/mL. Results ≥ 3.0 are considered positive and noted in red.

RL = Reference Lab; SC = SeraCare
### HIV Antigen/Antibody (s/co)¹

<table>
<thead>
<tr>
<th>Panel Member</th>
<th>Bleed Date</th>
<th>Days Since 1st Bleed</th>
<th>Abbott HIV Ag/Ab AxSYM Combo</th>
<th>Abbott HIV Ag/Ab PRISM Combo</th>
<th>Abbott HIV Ag/Ab ARCHITECT Combo</th>
<th>Bio-Rad Genscreen Ultra HIV Ag/Ab Combo</th>
<th>Murex HIV Ag/Ab Combo</th>
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</thead>
<tbody>
<tr>
<td>PRB970-01</td>
<td>03-Jun-08</td>
<td>0</td>
<td>1.1</td>
<td>1.6</td>
<td>2.1</td>
<td>1.7</td>
<td>1.3</td>
</tr>
<tr>
<td>PRB970-02</td>
<td>10-Jun-08</td>
<td>7</td>
<td>73.0</td>
<td>193.4</td>
<td>565.9</td>
<td>&gt;11.0</td>
<td>19.6</td>
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<tr>
<td>PRB970-03</td>
<td>13-Jun-08</td>
<td>10</td>
<td>20.2</td>
<td>39.7</td>
<td>45.2</td>
<td>&gt;11.0</td>
<td>18.3</td>
</tr>
<tr>
<td>PRB970-04</td>
<td>17-Jun-08</td>
<td>14</td>
<td>10.1</td>
<td>4.1</td>
<td>21.6</td>
<td>&gt;11.0</td>
<td>15.4</td>
</tr>
</tbody>
</table>

| Test Date | 27-May-10 | 12-Jul-10 | 09-May-14 | 29-Jun-10 | 22-Jun-10 |
| Test Site | RL        | RL        | SC        | SC        | RL        |
| Kit Part Code | 268320    | 7G46-48   | 2P36      | 72386     | 7G79-02   |
| Kit Lot No. | 87248LF00 | 89287HN00 | 37206L100 | 0A1050    | L397910   |
| Kit Exp Date | 02-Sep-10 | 07-Dec-10 | 16-Nov-14 | 30-May-11 | 31-Dec-10 |

¹Immunooassay results are means of duplicates expressed as signal to cutoff ratios (s/co). Ratios ≥1.0 are considered reactive and noted in red.

RL = Reference Lab; SC = SeraCare

### HIV Antibody (s/co)¹

<table>
<thead>
<tr>
<th>Panel Member</th>
<th>Bleed Date</th>
<th>Days Since 1st Bleed</th>
<th>Avioq Microelisa System</th>
<th>Genetic Systems HIV-1 rLAV</th>
<th>Abbott HIV-1/HIV-2 rDNA</th>
<th>Bio-Rad HIV-1/HIV-2 Plus O Gen Sys</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRB970-01</td>
<td>03-Jun-08</td>
<td>0</td>
<td>0.4</td>
<td>0.1</td>
<td>0.2</td>
<td>0.1</td>
</tr>
<tr>
<td>PRB970-02</td>
<td>10-Jun-08</td>
<td>7</td>
<td>0.2</td>
<td>0.1</td>
<td>0.3</td>
<td>0.1</td>
</tr>
<tr>
<td>PRB970-03</td>
<td>13-Jun-08</td>
<td>10</td>
<td>0.2</td>
<td>0.1</td>
<td>4.1</td>
<td>2.7</td>
</tr>
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<td>14</td>
<td>1.4</td>
<td>2.5</td>
<td>9.9</td>
<td>&gt;11.1</td>
</tr>
</tbody>
</table>

| Test Date | 14-Jun-10 | 11-May-10; 25-May-10 | 22-Jun-10 | 15-Jul-10 |
| Test Site | SC        | SC                   | SC        | SC        |
| Kit Part Code | 100384     | 32511                | 3A77-68   | 32588     |
| Kit Lot No. | J0904      | 197DAA-05            | 83470M500 | 042EBB-05 |
| Kit Exp Date | 12-Jan-11 | 01-Jun-10            | 22-Aug-10 | 14-Oct-10 |

¹Immunooassay results are means of duplicates expressed as signal to cutoff ratios (s/co). Ratios ≥1.0 are considered reactive and noted in red.

SC = SeraCare
### Anti-HIV Confirmatory and Rapid Tests

<table>
<thead>
<tr>
<th>Panel Member</th>
<th>Bleed Date</th>
<th>Days Since 1st Bleed</th>
<th>Calypte/MAXIM Western Blot Band Pattern</th>
<th>Calypte/MAXIM Western Blot Result</th>
<th>Innogenetics INNO-LIA HIV I/II Band Pattern</th>
<th>Innogenetics INNO-LIA HIV I/II Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRB970-01</td>
<td>03-Jun-08</td>
<td>0</td>
<td>No Bands</td>
<td>NEG</td>
<td>No Bands</td>
<td>NEG</td>
</tr>
<tr>
<td>PRB970-02</td>
<td>10-Jun-08</td>
<td>7</td>
<td>No Bands</td>
<td>NEG</td>
<td>No Bands</td>
<td>NEG</td>
</tr>
<tr>
<td>PRB970-03</td>
<td>13-Jun-08</td>
<td>10</td>
<td>No Bands</td>
<td>NEG</td>
<td>No Bands</td>
<td>NEG</td>
</tr>
<tr>
<td>PRB970-04</td>
<td>17-Jun-08</td>
<td>14</td>
<td>24</td>
<td>IND</td>
<td>24, 41</td>
<td>POS</td>
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</table>

**Test Date**
- 7-Jun-10
- 7-Jun-10
- 30-Jun-10
- 30-Jun-10

**Test Site**
- SC
- SC
- RL
- RL

**Kit Part Code**
- 98002
- 98002
- 80540
- 80540

**Kit Lot No.**
- A1034-083
- A1034-083
- 202524
- 202524

**Kit Exp Date**
- 03-Feb-11
- 03-Feb-11
- 01-Jan-11
- 01-Jan-11

*RL = Reference Lab; SC = SeraCare
NEG = Negative; POS = Positive; IND = Indeterminate*
### Anti-HIV Confirmatory and Rapid Tests

<table>
<thead>
<tr>
<th>Panel Member</th>
<th>Bleed Date</th>
<th>Days Since 1st Bleed</th>
<th>Inverness Determine HIV-1/2 Ag/Ab Combo HIV Ag</th>
<th>Inverness Determine HIV-1/2 Ag/Ab Combo HIV-1/2</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRB970-01</td>
<td>03-Jun-08</td>
<td>0</td>
<td>NEG</td>
<td>NEG</td>
</tr>
<tr>
<td>PRB970-02</td>
<td>10-Jun-08</td>
<td>7</td>
<td>POS</td>
<td>NEG</td>
</tr>
<tr>
<td>PRB970-03</td>
<td>13-Jun-08</td>
<td>10</td>
<td>POS</td>
<td>NEG</td>
</tr>
<tr>
<td>PRB970-04</td>
<td>17-Jun-08</td>
<td>14</td>
<td>NEG</td>
<td>POS</td>
</tr>
</tbody>
</table>

**Test Date**: 25-Jun-10

**Test Site**: SC

**Kit Part Code**: 7D26-46

**Kit Lot No.**: 100203

**Kit Exp Date**: 04-Dec-10

SC = SeraCare
NEG = Negative; POS = Positive

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**ASK ABOUT RELATED SERACARE PRODUCTS**

- AccuVert™ Seroconversion Panels
- Complete BioCollections™ Biological Materials
- ACCURUN® independent quality controls
- SeraCon™ and Basematrix Processed Plasma

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The Package Insert for this panel in PDF form can be found at [www.seracare.com](http://www.seracare.com)

A printed copy of the Package Insert or Data Sheet may be requested by email at info@seracare.com, or by phone at 508.244.6400