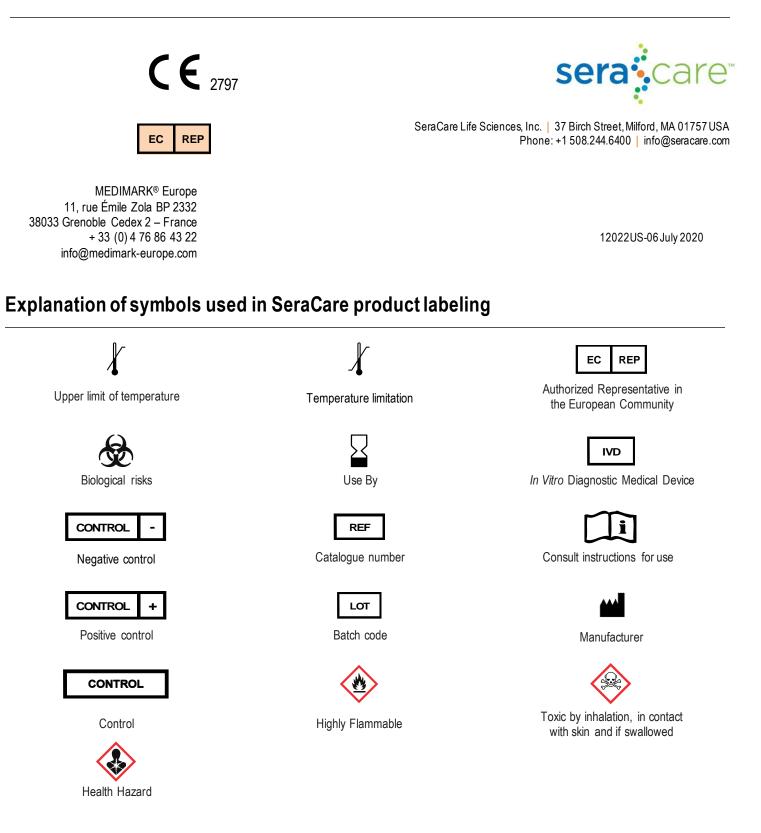
## ACCURUN® 106 SERIES 1000

HIV-1 Antigen Positive Quality Control



# sera care

### ACCURUN<sup>®</sup> 106 SERIES 1000 HIV-1 Antigen Positive Quality Control

#### NAME AND INTENDED USE

ACCURUN controls are intended to estimate laboratory testing precision and can be used to detect errors in laboratory testing procedures. ACCURUN<sup>®</sup> 106 HIV-1 Antigen Positive Quality Control Series 1000 is formulated for use with *in vitro* diagnostic test methods that detect HIV-1 antigen. *For In Vitro Diagnostic Use.* 

#### SUMMARY

Frequent testing of independent quality control samples provides the analyst with a means of monitoring the performance of laboratory assays. Routine use of controls enables laboratories to monitor day-to-day test variation, lot-to-lot performance of test kits, and operator variation, and can assist in identifying increases in random or systematic error. A well designed quality control program can provide added confidence in the reliability of results obtained for unknown specimens. The use of independent controls may provide valuable information concerning laboratory proficiency and kit lot variation that may affect assay sensitivity<sup>1</sup>.

#### PRINCIPLES OF THE PROCEDURE

ACCURUN 106 HIV-1 Antigen Positive Quality Control Series 1000 is designed for use with *in vitro* assay procedures for the purpose of monitoring test performance. ACCURUN 106 HIV-1 Antigen Positive Quality Control Series 1000 is manufactured from HIV-1 viral lysate derived from human cell culture and is diluted in human serum or plasma nonreactive for HBsAg and negative for antibodies to HIV 1 and 2, HCV and HTLV. ACCURUN controls do not have assigned values. Specific levels of reactivity will vary among different manufacturer's assays, different procedures, different lot numbers and different laboratories.

#### REAGENTS

Item No. 2015-0065 Item No. 2015-0066

3 vials, 5.0 mL per vial 12 vials, 3.5 mL per vial

This control contains stabilizers (EDTA, buffering agents) and 0.1% ProClin<sup>®</sup> (5-chloro-2-methyl-4-isothiazolin-3-one & 2-methyl-4-isothiazolin-3-one) as preservative. The HIV-1 viral lysate has been inactivated by treatment with Triton X-100, beta propiolactone, and ultraviolet irradiation.

#### WARNINGS AND PRECAUTIONS

#### For In Vitro Diagnostic Use

CAUTION: Handle ACCURUN controls and all human blood products as though capable of transmitting infectious agents. ACCURUN 106 HIV-1 Antigen Positive Quality Control Series 1000 is manufactured from HIV-1 viral lysate derived from human cell culture, and is diluted in human serum or plasma nonreactive for HBsAg and negative for antibodies to HIV 1 and 2, HCV and HTLV with current FDA licensed tests. Infectious materials have been inactivated with Triton X-100, beta propiolactone, and ultraviolet irradiation.

#### Safety Precautions

Use the Centers for Disease Control (CDC) recommended universal precautions for handling ACCURUN and human blood<sup>2</sup>. Do not pipette by mouth; do not smoke, eat or drink in areas where specimens are being handled. Clean any spillage by immediately wiping up with 0.5% sodium hypochlorite solution. Dispose of all specimens, controls, and materials used in testing as though they contain infectious agents.

#### Handling Precautions

Do not use ACCURUN controls beyond the expiration date. Avoid contamination of the controls when opening and closing the vials.

#### STORAGE INSTRUCTIONS

Store ACCURUN 106 HIV-1 Antigen Positive Quality Control Series 1000 at 2-8°C. Once opened, ACCURUN controls should be discarded after 60 days. After opening, record the date opened and the expiration date on the vial. Multiple freeze-thaw cycles are not recommended, and may have variable adverse effects upon test results. To prevent leakage, store vials upright.

#### INDICATIONS OF REAGENT INSTABILITY OR DETERIORATION

Alterations in physical appearance may indicate instability or deterioration of ACCURUN controls. Solutions that are visibly turbid should be discarded.

#### PROCEDURE

#### Materials Provided

ACCURUN 106 HIV-1 Antigen Positive Quality Control Series 1000 is manufactured from HIV-1 viral lysate derived from human cell culture and human serum or plasma nonreactive for HBsAg and negative for antibodies to HIV 1 and 2, HCV and HTLV.

#### Materials Required but not Provided

Refer to instructions supplied by manufacturers of the test kits to be used.

#### Instructions for Use

Allow the controls to reach room temperature prior to use, then return controls to refrigerated storage immediately after use. Mix the contents of the vials by gentle inversion. ACCURUN controls should be included in a test run using exactly the same procedure provided by the manufacturer for unknown specimens. ACCURUN controls must NOT be substituted for the positive and negative control reagents provided with manufactured test kits.

#### Quality Control

Since ACCURUN controls do not have assigned values, it is recommended that each laboratory validate the use of each lot of ACCURUN with each specific assay system prior to its routine use in the laboratory.

#### INTERPRETATION OF RESULTS

Levels of reactivity of ACCURUN 106 HIV-1 Antigen Positive Quality Control Series 1000 may vary with different manufacturers' tests and different test kit lots. Since the control does not have an assigned value, the laboratory must establish a range for each lot of ACCURUN 106 HIV-1 Antigen Positive Quality Control Series 1000. When results for ACCURUN 106 HIV-1 Antigen Positive Quality Control Series 1000 are outside the established acceptance range of values, it may be an indication of unsatisfactory test performance. Possible sources of error include: deterioration of test kit reagents, operator error, faulty performance of equipment, or contamination of reagents.

#### LIMITATIONS OF THE PROCEDURE

ACCURUN CONTROLS MUST NOT BE SUBSTITUTED FOR THE POSITIVE AND NEGATIVE CONTROL REAGENTS PROVIDED WITH MANUFACTURED TEST KITS. TEST PROCEDURES and INTERPRETATION OF RESULTS provided by manufacturers of test kits

must be followed closely. Deviations from procedures recommended by test kit manufacturers may produce unreliable results. ACCURUN controls are not calibrators and should not be used for assay calibration. Performance characteristics for ACCURUN 106 HIV-1 Antigen Positive Quality Control Series 1000 have been established only for HIV-1 antigen. Adverse shipping and storage conditions or use of outdated controls may produce erroneous results.

#### EXPECTED RESULTS

ACCURUN 106 HIV-1 Antigen Positive Quality Control Series 1000 DOES NOT HAVE AN ASSIGNED VALUE. This control is formulated to produce positive reactivity with the test kits listed in Table 1. Specific levels of reactivity will vary among different manufacturers' assays, different procedures, different lot numbers and different laboratories. Procedures for implementing a quality assurance program and monitoring test performance on a routine basis must be established by each individual laboratory. Each laboratory should establish its own range of acceptable values. For example, the acceptable range might include all values within 2 standard deviations of the mean of 20 data points obtained in 20 runs over a period of 30 days<sup>3</sup>.

#### SPECIFIC PERFORMANCE CHARACTERISTICS

ACCURUN controls have been designed for use with *in vitro* assay procedures for purposes of monitoring assay performance. ACCURUN 106 HIV-1 Antigen Positive Quality Control Series 1000 is formulated to be reactive for HIV-1 antigen and is diluted in human serum or plasma that is tested and found nonreactive for HBsAg and negative for antibodies to HIV 1 and 2, HCV, and HTLV. ACCURUN controls do not have assigned values. Specific levels of reactivity will vary among different manufacturers' assays, different procedures, different lot numbers, and different laboratories. Procedures for implementing a quality assurance program and monitoring test performance on a routine basis must be established by each individual laboratory.

#### REFERENCES

- Green IV GA, Carey RN, Westgard JO, Carten T, Shablesky LA, Achord D, Page E, and Le AV. Quality control for qualitative assays: quantitative QC procedure designed to assure analytical quality required for an ELISA for hepatitis B surface antigen. Clin. Chem. 43:9 1618-1621, 1997.
- 2 Siegel JD, Rhinehart E, Jackson M, Chiarello L, and the Healthcare Infection Control Practices Advisory Committee, 2007 Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings.
- Statistical Quality Control for Quantitative Measurements: Principles and Definitions; Approved Guideline
  – Second Edition. NCCLS document C24-A2, 1999.

Table 1. ACCURUN 106 HIV-1 Antigen Positive Quality Control Series 1000 is formulated to produce positive reactivity with the following test kit:

Manufacturer	Assay
Abbott Diagnostics, Sligo Ireland	Architect HIV Ag/Ab Combo

For assistance, contact SeraCare Technical Support at +1 508.244.6400.