# **ACCURUN® 315 SERIES 150**

HIV-1 RNA Positive Quality Control







LGC Clinical Diagnostics, Inc. | 37 Birch Street, Milford, MA 01757 USA Phone: +1 508.244.6400 | CDx-Info@LGCGroup.com

MEDIMARK® Europe 11, rue Émile Zola BP 2332 38033 Grenoble Cedex 2 – France + 33 (0) 4 76 86 43 22 info@medimark-europe.com

11468GB-15

September 2021

## Explanation of symbols used in LGC Clinical Diagnostics product labeling



Upper limit of temperature



Biological risks



Negative control



Positive control



Control



Temperature limitation



Use By



Catalogue number



Batch code



Highly Flammable



Authorized Representative in the European Community



In Vitro Diagnostic Medical Device



Consult instructions for use



Manufacturer



Toxic by inhalation, in contact with skin and if swallowed





## ACCURUN® 315 SERIES 150 HIV-1 RNA 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® 315 HIV-1 RNA Positive Quality Control Series 150 is formulated for use with *in vitro* diagnostic test methods that detect and quantitate HIV-1 RNA. ACCURUN 315 HIV-1 RNA Positive Quality Control Series 150 is designed for a specific range of HIV-1 RNA. Additional controls at different concentrations of HIV-1 RNA are available separately from LGC Clinical Diagnostics.

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 1.

#### PRINCIPLES OF THE PROCEDURE

ACCURUN 315 HIV-1 RNA Positive Quality Control Series 150 is designed for use with in vitro assay procedures for the purpose of monitoring test performance. ACCURUN 315 HIV-1 RNA Positive Quality Control Series 150 is prepared by diluting a cultured HIV-1 type B virus (8E5) in HIV-1 RNA negative defibrinated human plasma. The 8E5 virus contains an irtact but defective viral genome<sup>2</sup>. ACCURUN 315 HIV-1 RNA Positive Quality Control Series 150 is nonreactive for HBsAg and antibodies to HIV 1 and HIV 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. 2020-0087

10 vials, 1.2 ml per vial

ACCURUN 315 HIV-1 RNA Positive Quality Control Series 150 contains stabilizers and 0.09% sodium azide

#### 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 315 HIV-1 RNA Positive Quality Control Series 150 is manufactured from human serum or plasma nonreactive for HBsAg and antibodies to HIV 1 and HIV 2, HCV and HTLV with current FDA licensed tests.

#### Safety Precautions

Use Centers for Disease Control (CDC) recommended universal precautions for handling ACCURUN and human blood<sup>3</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.

Do not use ACCURUN controls beyond the expiration date. Avoid contamination of the controls when opening and closing the vials. To prevent formation of potentially explosive compounds due to reactions of sodium azide and copper or lead pipes, flush waste lines with large quantities of water.

### STORAGE INSTRUCTIONS

For maximum stability, ACCURUN 315 HIV-1 RNA Positive Quality Control Series 150 should be stored at -70°C. If preferred, vials may be stored at -20°C for up to six months. 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 315 HIV-1 RNA Positive Quality Control Series 150 is formulated to be reactive for HIV-1 RNA and nonreactive for HBsAg and antibodies to HIV 1 and HIV 2, HCV and HTLV.

### Materials Required but not Provided

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

- Prior to each use, allow the control to reach room temperature and mix by gertle inversion. Each vial of ACCURUN 315 should not be used more than three times and must be used within 10
- days after first opening.
- Immediately after each use, refrigerate ACCURUN 315 at 2-8°C.
- When the vial is opened for the first time, record the date opened and the expiration date on the vial.
- To minimize the chance of contamination, discard the vial after first use

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 315 HIV-1 RNA Positive Quality Control Series 150 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 315 HIV-1 RNA Positive Quality Control Series 150. When results for ACCURUN 315 HIV-1 RNA Positive Quality Control Series 150 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 315 HIV-1 RNA Positive Quality Control Series 150 have been established only for HIV-1 RNA. Adverse shipping and storage conditions or use of outdated controls may produce erroneous results

#### **EXPECTED RESULTS**

ACCURUN 315 HIV-1 RNA POSITIVE QUALITY CONTROL SERIES 150 DOES NOT HAVE AN ASSIGNED

VALUE. 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 ponts obtained in 20 runs over a period of 30 days4.

Table 1 lists typical data for ACCURUN 315 HIV-1 RNA Positive Quality Control Series 150. Additional controls at different concentrations are available separately from LGC Clinical Diagnostics.

#### SPECIFIC PERFORMANCE CHARACTERISTICS

ACCURUN controls are designed for use with in vitro assay procedures for purposes of monitoring assay performance. ACCURUN 315 HIV-1 RNA Positive Quality Control Series 150 is formulated to be reactive for HIV-1 RNA and nonreactive for HBsAg and antibodies to HIV 1 and HIV 2, HCV and HTLV. ACCURUN controls do not have assigned values. Specific levels of reactivity will vary among different manufacturers' assays, different procedures, different lct 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
- forhepatitis B surface antigen. Clin. Chem. 43:9 1618-1621, 1997.

  Foks TM, Benn S, Rabson A, Theodore T, Hoggan MD, Marting M, Lightfoote M, Sell K. Characterization of a continuous T-cell line susceptible to the cytopathic effects of the acquired immunodeficiency syndrome (AIDS) associated retrovirus. Proc. Natl. Acad. Sci. USA 82:4539-4543, 1985.
- 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 documentC24-A2, 1999

Table 1. Typical data for ACCURUN 315 HIV-1 RNA Positive Quality Control Series 150.

Manufacturer	Assay	Results: Copies/ml	Results: IU/ml
Roche Molecular Systems, Inc. Pleasanton, CA	COBAS <sup>®</sup> AmpliPrep/ COBAS <sup>®</sup> TaqMan <sup>®</sup> HIV Test-1 v2.0	181	308
Abbott Laboratories Abbott Park, IL	m2000 RealTime HIV-1 Assay	142	247
		Result	
Grifols Diagnostic Solutions Inc. Emeryville, CA	PROCLEIX® ULTRIO® Assay	Positive	
Roche Molecular Systems, Inc. Pleasanton, CA	cobas TaqScreen MPX Test on s201	Positive	

For assistance, contact LGC Clinical Diagnostics Technical Support at +1 508,244,6400.

Phone: +1 508.244.6400 | Toll Free (US Only) 800.676.1881