

BIOPHEN™ Rivaroxaban Calibrator Low

REF 226001-RUO

CALI CALII CALIII 4 vials x 1 mL

BIOPHEN™ Rivaroxaban Plasma Calibrator

REF 222701-RUO

CAL1 CAL2 CAL3 4 vials x 1 mL

FOR RESEARCH USE ONLY.
 DO NOT USE IN DIAGNOSTIC PROCEDURES.

English, revision: 08-2023

INTENDED USE:

For calibration of Rivaroxaban assays, using a quantitative automated method. **This kit is for research use only and must not be used for patient diagnosis or treatment.**

SUMMARY AND EXPLANATION:

Technical:

These calibrators are used to establish the calibration curve for anti-Xa chromogenic assays of Rivaroxaban in plasma (BIOPHEN™ DiXal, BIOPHEN™ Heparin LRT, low range / standard range).

REAGENTS:

- CALI** Lyophilized human plasma without Rivaroxaban.
- CALII** Lyophilized human plasma containing approximately 50 ng/mL of Rivaroxaban.
- CALIII** Lyophilized human plasma containing approximately 100 ng/mL of Rivaroxaban.
- CAL1** Lyophilized human plasma without Rivaroxaban.
- CAL2** Lyophilized human plasma containing approximately 250 ng/mL of Rivaroxaban.
- CAL3** Lyophilized human plasma containing approximately 500 ng/mL of Rivaroxaban.

Calibrator plasmas contain stabilizing agents.

The calibrator concentrations may vary slightly from one batch to another. For the assay, see the exact values indicated on the flyer provided with the kit used.

The product is classified as non-hazardous and is not subject to labeling according to EC Regulation No. 1272/2008 [CLP].

WARNINGS AND PRECAUTIONS:

- Some reagents provided in these kits contain materials of human origin. Whenever human plasma is required for the preparation of these reagents, approved methods are used to test the plasma for the antibodies to HIV 1, HIV 2 and HCV, and for hepatitis B surface antigen, and results are found to be negative. However, no test method can offer complete assurance that infectious agents are absent. Therefore, users of reagents of these types must exercise extreme care in full compliance with safety precautions in the manipulation of these biological materials as if they were infectious.
- Waste should be disposed of in accordance with applicable local regulations.

REAGENT PREPARATION:

Gently remove the freeze-drying stopper, to avoid any product loss when opening the vial.

CALI CALII CALIII CAL1 CAL2 CAL3 Reconstitute the contents of each vial with exactly 1 mL of distilled water.

Shake vigorously until complete dissolution while avoiding formation of foam and load it directly on the analyzer following Application Guide instruction.

For manual method, allow to stabilize for 10 minutes at room temperature (18-25°C), homogenize before use.

This plasmatic reagent can be more or less turbid after reconstitution. This turbidity is mainly due to plasma lipids that, after freeze-drying, become "less" soluble and may form a slight deposit. If necessary, let each vial stabilize 10 minutes at room temperature and shake before use.

STORAGE AND STABILITY:

Unopened reagents should be stored at 2-8°C in their original packaging. Under these conditions, they can be used until the expiry date printed on the kit.

CALI CALII CALIII CAL1 CAL2 CAL3 Reagent stability after reconstitution, free from any contamination or evaporation, and stored closed, is of:

- 7 days at 2-8°C.
- 60 days frozen at -20°C or less*
- Stability on board of the analyzer: see the specific Application Guide.

*Thaw only once, as rapidly as possible at 37°C and use immediately.

REAGENTS AND MATERIALS REQUIRED BUT NOT PROVIDED:

- Laboratory material.

TRACEABILITY:

Calibrators are traceable to European Pharmacopoeia (Ph. Eur.) Certified Reference Standard for Rivaroxaban.

Certificate of traceability and uncertainty is available on the HYPHEN BioMed website:

Uncertainty			
CALI	± 0.0 ng/mL	CAL1	± 0.0 ng/mL
CALII	± 2.4 ng/mL	CAL2	± 15 ng/mL
CALIII	± 4.2 ng/mL	CAL3	± 36 ng/mL

QUALITY CONTROL:

For calibration of Rivaroxaban assays by anti-Xa methods (low range or standard range), with BIOPHEN™ DiXal (221030-RUO) and BIOPHEN™ Heparin LRT kits (221011-RUO/221013-RUO/221015-RUO).

The target values are determined from multi-reagent and multi-instrument tests. The use of quality controls serves to validate method compliance, along with between-series assay homogeneity for a given batch of reagents.

Include the quality controls with each series, as per good laboratory practice, in order to validate the test.

A new calibration curve should be established, preferably for each test series, and at least for each new reagent batch, or after analyzer maintenance, or when the measured quality control values fall outside the acceptance range for the method.

LIMITATIONS:

- If the calibrators are used under measurement conditions other than those validated by HYPHEN BioMed, the test results may vary. The laboratory is responsible for validating the use of these calibrators in its own analytical system.
- Any reagent presenting no limp appearance or showing signs of contamination must be rejected.

The results obtained should be for research use only and must not be used for patient diagnosis or treatment.

REFERENCES:

1. Perzborn E, *et al.* *In vitro* and *in vivo* studies of the novel antithrombotic agent BAY 59-7939-an oral, direct Factor Xa inhibitor. *J Thromb Haemost*, 2005.
2. Kubitzka D, *et al.* Safety, pharmacodynamics, and pharmacokinetics of single doses of BAY 59-7939, an oral, direct factor Xa inhibitor. *Clin Pharmacol Ther*, 2005.
3. Lang D, *et al.* Metabolism and excretion of rivaroxaban - an oral, direct Factor Xa inhibitor - in rats, dogs and humans. *Drug Metab Dispos*, 2009.
4. Rohde G. Determination of rivaroxaban – a novel, oral, direct Factor Xa inhibitor- in human plasma by High-performance liquid chromatography- tandem mass spectrometry. *J. Chromatogr.* 2008.

For customer support or Application Guides, please contact your local provider or distributor (see www.hyphen-biomed.com).

Changes compared to the previous version.

The following symbols may appear on the product labeling:

REF Catalogue number	LOT Batch code	RUO Product for <i>in-vitro</i> research use, only
Rx Numerical < x> identification of reagent	 See instructions for use	WHO STD WHO standard code
 Temperature limitation	 Manufacturer	 YYYY-MM-DD Use by
 Biological risks	 Reconstitution volume	CONTENTS Contents
Cx Numerical < x> identification of control	 See instructions in Method Application guide	CONTAINS Contains
EXP Expiration date	 Contains sufficient for <n> tests	UNIT Measurement unit
TARGET VALUE Target Value	 Keep away from sunlight and heat	CALx Numerical < x> identification of calibrator
UDI Unique Device Identifier	 Contains biological material of animal origin	 Contains human blood or plasma derivatives
ACCEPTANCE RANGE Acceptance range	DANGER Danger	WARNING Warning