

**BIOPHEN™ Apixaban Control**

REF 225201-RUO C1 CII 6 x 1 mL

REF 225301-RUO C1 C2 6 x 1 mL

Human plasmas for the quality control of Apixaban assays  
by the anti-Xa method.**FOR RESEARCH USE ONLY.****DO NOT USE IN DIAGNOSTIC PROCEDURES.**

English, last revision: 09-2018

**INTENDED USE:**

The BIOPHEN™ Apixaban Control kits consist of lyophilized human plasmas, spiked with Apixaban at various concentrations, for the quality control of Apixaban assays.

They are titrated and optimized for the assay of Apixaban by anti-Xa chromogenic technique.

**This kit is for research use only and must not be used for patient diagnosis or treatment.****SUMMARY AND EXPLANATION:****Technical:**

These controls are proposed for the quality control of anti-Xa chromogenic assays of Apixaban in plasma (BIOPHEN™ DiXal and BIOPHEN™ Heparin LRT, low range / standard range).

**REAGENTS:****C1 Control I:** Lyophilized human plasma containing a titrated quantity of Apixaban of approximately 25 ng/mL.**CII Control II:** Lyophilized human plasma containing a titrated quantity of Apixaban of approximately 75 ng/mL.**C1 Control 1:** Lyophilized human plasma containing a titrated quantity of Apixaban of approximately 200 ng/mL.**C2 Control 2:** Lyophilized human plasma containing a titrated quantity of Apixaban of approximately 400 ng/mL.

The control plasmas contain stabilizing agents.

The control 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.

**BIOPHEN™ Apixaban Control Low**REF 225201-RUO → C1 6 vials of 1 mL  
CII 6 vials of 1 mL**BIOPHEN™ Apixaban Control**REF 225301-RUO → C1 6 vials of 1 mL  
C2 6 vials of 1 mL**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.
- Use only the reagents from the same batch of kits.
- Aging studies show that the reagents can be shipped at room temperature without degradation.
- This device of *in vitro* use is intended for professional use in the laboratory.

**REAGENT PREPARATION:**

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

**C1 CII C1 C2** 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.

**C1 CII C1 C2** Reagent stability after reconstitution, free from any contamination or evaporation, and stored closed, is of:

- 7 days at 2-8°C.
- 48 hours at room temperature (18-25°C).
- 6 months frozen at -20°C or less\*
- Stability on board of the analyzer: see the specific application.

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

**REAGENTS AND MATERIALS REQUIRED BUT NOT PROVIDED:****Reagents:**

- Distilled water.

**Materials:**

- Calibrated pipettes.

**TRACEABILITY:**

The Apixaban control plasmas are titrated relative to a Reference Internal Standard, whose qualification is linked to the reference method by LC-MS/MS.

**QUALITY CONTROL:**

The BIOPHEN™ Apixaban Control kits are used for the quality control of Apixaban assays by anti-Xa methods (low range or standard range), such as those provided by the BIOPHEN™ DiXal (221030-RUO) and BIOPHEN™ Heparin LRT (221011-RUO/221013-RUO/221015-RUO) kits.

The control target values are determined from multi-reagent (BIOPHEN™ DiXal, BIOPHEN™ Heparin LRT) and multi-instrument (Sysmex CS-series or equivalent) 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.

If the controls fall outside of the acceptable range, the series of assays must be invalidated and the analyses repeated. Check all system parameters before repeating the series.

**LIMITATIONS:**

- If the controls 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 controls in its own analytical system.
- Any reagent presenting an unusual 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:**

- Becker RC. *et al.*, Chromogenic laboratory assays to measure the factor Xa-Inhibiting properties of Apixaban-an oral, direct and selective factor Xa inhibitor. J Thromb.
- Douxflis J. *et al.*, Impact of Apixaban on routine and specific coagulation assays: a practical laboratory guide. Thromb Haemost. 2013 June; 110.2; 1-12.
- Samama MM, Guinet C. Laboratory assessment of new anticoagulants. Clin. Chem. Lab. Med. 2011; 49(5), 761-772.

**SYMBOLS:**

Symbols used and signs listed in the ISO 15223-1 standard, see Symbol definitions document.

Changes compared to the previous version.