ANIARA
DIAGNOSTICA INC

YOUR LAB DESERVES A PARTNER.
Not a vendor.

HEPARIN ANTI-IIA · UFH MEASUREMENT · DIRECT XA-INHIBITOR INTERFERENCE

Read UFH cleanly — *even through an anti-Xa DOAC.*

Direct Xa-inhibitor DOACs (**apixaban, rivaroxaban**) circulate as anti-Xa activity. In a plasma sample that still contains residual drug, a **standard anti-Xa heparin assay cannot separate that signal from heparin** — so UFH activity is **overestimated.** Because BIOPHEN™ Anti-IIa measures heparin through **thrombin (FIIa) inhibition** rather than Factor Xa, direct Xa inhibitors **do not contribute to the result** — UFH activity is measured specifically.

THE ANTI-IIA HEPARIN ASSAY

CHROMOGENIC · ANTI-IIA · TWO-STAGE

BIOPHEN™ Anti-IIa Heparin Assay

Two-stage chromogenic method: the heparin–antithrombin complex neutralizes a defined excess of **thrombin (FIIa);** residual thrombin cleaves a thrombin-specific substrate to release pNA, **inversely proportional to heparin.** Measures UFH; **USP/EP-aligned;** plasma or purified solutions; manual or automated.

A220005
Kit

$593
RUO

Quantify against **UFH (heparin) calibrators** and verify with **normal / abnormal heparin controls.** Unlike adsorbent-removal methods or heparinase "corrected-heparin" subtraction, the anti-IIa method needs **no sample pretreatment** — it avoids the anti-Xa signal at source. Anti-Xa heparin reagents (BIOPHEN™ Heparin) remain available for routine monitoring where no direct Xa inhibitor is present.

WHY THE ANTI-IIA METHOD IS IMMUNE TO THE INTERFERENCE

THE PROBLEM

Anti-Xa heparin assays read residual **APIXABAN / RIVAROXABAN** in the sample as added anti-Xa activity, so UFH activity is **OVERESTIMATED** whenever direct Xa-inhibitor drug is still present.

THE MECHANISM

Direct Xa inhibitors block Factor Xa, not thrombin. Measuring heparin by **THROMBIN (FIIA) INHIBITION** sidesteps the anti-Xa signal entirely.

THE EVIDENCE

Stuart et al. recovered accurate UFH with **~192 NG/ML APIXABAN** or **~158 NG/ML RIVAROXABAN** present; falsely elevated UFH results fell from **9.4% TO 3.8%** after the method was adopted.

WHERE THE ANTI-IIA HEPARIN ASSAY FITS

- Direct Xa-inhibitor carryover
- Residual apixaban / rivaroxaban samples
- UFH activity measurement
- Antithrombin-mediated heparin activity
- Heparin anti-IIa vs anti-Xa
- ISTH-SSC–discussed strategy

SELECTED REFERENCES Anti-factor IIa (FIIa) heparin assay for patients on direct FXa inhibitors — evaluation of the BIOPHEN™ ANTI-IIa assay (Aniara Diagnostica) vs an anti-Xa heparin method for UFH in patients transitioning off apixaban / rivaroxaban: linear 0.1–1.3 IU/mL, slope ≈ 1.00, accurate UFH despite FXa-inhibitor carryover — Stuart et al., *J. Thromb. Haemost.* 2020; 18:1653–1660. · ISTH-SSC communication on managing direct FXa-inhibitor interference with heparin anti-Xa activity, citing the UFH-calibrated anti-IIa strategy — *J. Thromb. Haemost.* 2025. · Chromogenic heparin assays based on FIIa inhibition are unaffected by direct FXa inhibitors.

Regulatory: BIOPHEN™ Anti-IIa Heparin Assay (A220005) is **For Research Use Only** in the United States — not for use in diagnostic procedures; the published clinical evaluations above were conducted by the cited investigators under their own laboratory validation, and the manufacturer designates this assay RUO. CE-IVD / Health Canada configurations may apply in those regions. Statements describe analytical performance and assay interference; they are not clinical or dosing guidance. Pricing shown is US list and subject to change. Therapeutic agents named are referenced as analytes / scientific context and are not Aniara products. © 2026 Aniara Diagnostica, Inc.

Aniara Diagnostica, Inc.
WEST CHESTER, OHIO · 1-866-783-3797

aniara.com
SEARCH "ANTI-IIA HEPARIN" · OR ASK YOUR ANIARA REP

HYPHEN BioMed Aniara Diagnostica, Inc. is a distributor for HYPHEN BioMed

© HYPHEN BioMed · HeparinAntiIIa DOAC · H-036-00 · June 2026