ANIARA DIAGNOSTICA LLC

Please note that the uses described in the following page(s) have not been approved or cleared by FDA, with respect to the described assay or test.

In the US, the product is intended **For Research Use Only. Not for Use in Diagnostic Procedures.**

Aniara Diagnostica LLC • 7768 Service Center Drive • West Chester, OH 45069 • Phone (513) 770-1991
Fax (513) 573-9241 • Email info@aniara com • www.aniara.com

ANIARA
Manufactured By: HYPHEN BioMed

BIOPHEN DiXaI technical file (#A221030)

Intended use and applications

RUO: Laboratory monitoring of Direct FXa inhibitors (**DiXals**), and especially **Rivaroxaban**; when required. Measuring the DiXaI concentration in patients' plasma allows monitoring the therapy and adjusting drug dosage. This method is not appropriate for indirect inhibitors such as Fondaparinux or heparins.

Principle

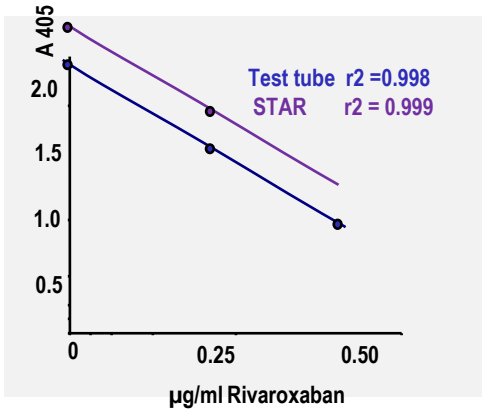
Quantitative determination of Rivaroxaban (or DiXaI) in human citrated plasma or purified milieu, using a chromogenic method, manual or automated.

R1: Human FXa, lyophilized.
R2: FXa specific chromogenic substrate (CS-11(65)), lyophilized.
R3: Reactional buffer, ready to use.

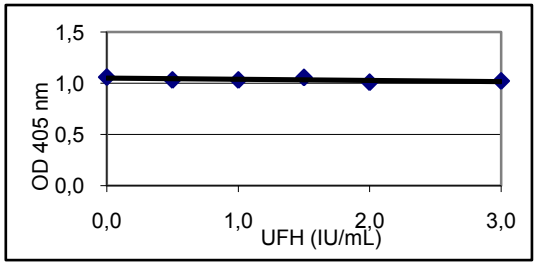
Characteristics and advantages

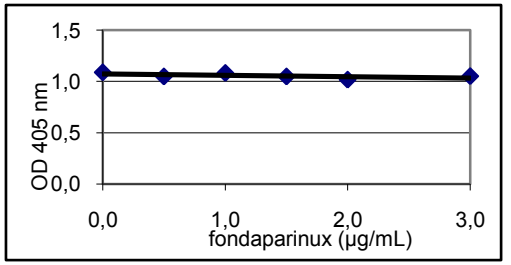
- **Simple and rapid:** lyophilised and ready to use; total assay time <5 min.
- **Flexible assay range**, easily adjusted to the specific DiXaI activity to be assayed.
- Easy to use on major **coagulation analyzers, microplate or with basic equipment (** ~100(STAR) or 150 (microplate) tests per kit).
- **Standardized** against a reference preparation of Rivaroxaban.
- Dynamic range ~ **0 - 0.5 µg/ml of Rivaroxaban in human citrated plasma** (dilution **1:20** with R3 buffer)
- Detection threshold: ~ **0.02 µg/ml**
- Highly **specific, sensitive, reproducible** (patients without DiXaI treatment measured <<0.05µg/ml; Intra assay CV<3 % ; Inter assay CV 10-15 %)
- **Highly stable (** ≥ 2weeks at 2-8 C , 7 days at RT(18-25 C), or frozen).
- **Safe, optimized, standardized**: highly purified human FXa, tested for viral safety.
- **No interference of** heparins 5UFH, LMWH) < 2IU/ml, and Fondaparinux <2µg/ml added to plasma; and of FX deficiency.

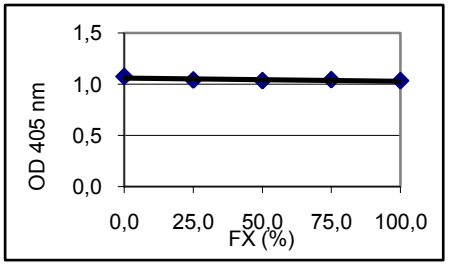
Calibration curve

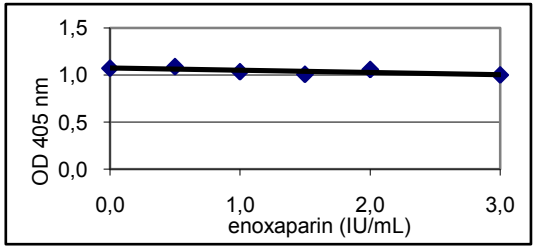


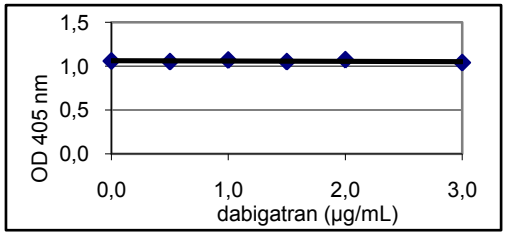
Evaluation of specificity and interferences (microplate method):

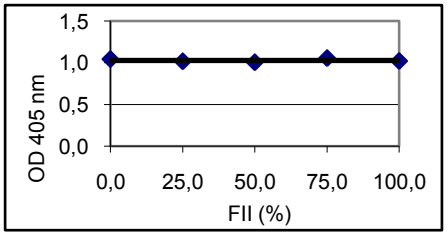












Minimal interference of plasma factors. Totally insensitive to the presence of heparin-like indirect anti-FXa activities such as UFH, LMWH, Fondaparinux/Arixtra®, Sodium Danaparoid at usual therapeutic doses.

Intra and inter assay reproducibility ; recovery study

STAR	Target µg/ml	Intra assay (N=10)			Inter assay (N=10)		
		µg/ml	SD	CV	µg/ml	SD	CV
C1	0.20	0.17	**0.004**	2.5%	0.21	**0.03**	14.4
C2	0.40	0.40	**0.007**	1.7%	0.44	**0.05**	10.8

Rivaroxaban	+0µM	+0.50 µM
Mean recovered µM (N=10)	0.01	0.47
SD	0.011	0.017
Min-Max	0-0.03	0.44 - 0.49

Results are reproducible for a same sample and from series to series. Rivaroxaban is accurately and homogeneously recovered in 10 normal plasmas spiked with a reference preparation of Rivaroxaban.

ANIARA
7768 Service Center Drive • West Chester OH 45069
Phone: 513.770.1991 Toll Free: 866.783.3797 Fax: 513.573.9241 Email: info@aniara.com
www.aniara.com

Form AH138
05-2010
D.750.30/BI/1030 /1 – (Date:Oct 2009)