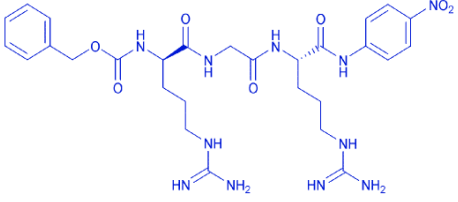


## RGR-XaChrom

**Catalog No: 100-03**

**Application:** Highly sensitive chromogenic substrate for factor Xa.

**Sequence:** Z-D-Arg-Gly-Arg-pNA · 2HCl

Structure	MW	K <sub>cat</sub>	K <sub>m</sub>
	714.6 g/mol	Bovine FXa:  290 s <sup>-1</sup>	Bovine FXa: 0.1 mM  Human plasma activated with RVV: 0.3 mM

Note: K<sub>m</sub> and K<sub>cat</sub> is reported using the following buffer: 50 mM Tris buffer, pH 8.3, 0.25 M NaCl, 37°C

**Aliquot size:** 5mg RGR-XaChrom and 20mg mannitol. Soluble in distilled water.

**Storage:** 2-8 °C

Substrate may be used until expiration date on label when stored unopened (protected from light and moisture).

Once reconstituted substrate expires within 6 months. Must avoid contamination by micro-organisms.

**Reconstitution:**

Desired concentration (mM)	Volume of H <sub>2</sub> O to add (mL)
2	3.498
3	2.332
4	1.749

**Sample protocol for determination of Factor Xa:**

Materials needed but not provided:

50 mM Tris, 130 mM NaCl, 0.5% BSA, pH 8.3

FXa: Dilute to 0.001 mg/mL with the above buffer. Unknown FXa containing samples might need to be diluted until in measuring range.

Reconstitute the substrate to 2 mM with H<sub>2</sub>O.

Protocol:

Working Substrate Solution: Add 1.1 mL of 2 mM substrate to 8.9 mL buffer.
Reaction: 950 µL of Working Substrate Solution 50 µL of FXa Sample Determination of ΔOD/min at 405 nm for 2 min at 37°C.

**RESEARCH USE ONLY**

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