

5-ENZYME Factor Xa (Bovine)

REF 5D-60217

**For Research Use Only.
Not for Use in Diagnostic Procedures.
For *in vitro* use only.**

**Store at 2-8°C
1 vial of 30 µg**

English, last revision: 03-2023

ORIGIN:

Highly purified Factor X from citrated bovine plasma, activated with agarose bound RVV.

PRESENTATION:

Each vial containing approximately 30 µg of highly purified bovine Factor Xa in presence of additives and preservatives.
(1 Unit FXa is the amount which can be generated from 1 mL citrated bovine plasma, i.e about 10 µg).

This kit is for research use only and should not be used for patient diagnosis or treatment.

RECONSTITUTION:

Each vial must be restored with 10 mL distilled water, in order to get a concentration of about 3 µg/mL. It can be diluted to the desired concentration, when required, in the adequate buffer.

EXCIPIENTS:

Content per vial: Tris (60mg), Sodium chloride (50mg), PEG-6000 (10mg), BSA (20mg).

PURITY:

The Factor X zymogen used for preparing Factor Xa has one major band of about 55,000 daltons on SDS-PAGE.

ACTIVITY:

Tested for its amidolytic activity on a FXa specific substrate, in a purified system without or with RVV. All FX is converted to FXa. Chromogenic activity on specific substrates (expressed in nkats): tested in the optimized conditions (0.05M Tris buffer at pH8.40, containing 0.30M NaCl), the specific activities are defined on these FXa substrates:

5D-30803 | 5D-30804 | 5D-30807

The exact activity in nkats/µg is reported on the analysis certificate for each substrate.

VIRAL SAFETY:

The plasma used for Factor Xa preparation and for BSA was tested with registered methods and found negative for bovine infectious diseases, notably for the bovine spongiform encephalopathy. However, no assay may warrant the total absence of infectious agents. Any product of bovine origin must then be handled with all the required cautions, as being potentially infectious.

USE:

For *in vitro* use only. All research studies and protocols where a source of highly purified bovine Factor Xa is necessary. Studies on heparin and low molecular weight heparin.

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

STABILITY:

Lyophilized:

- Until the expiration date printed on the kit.

After reconstitution, in their original vial, and provided any contamination or evaporation is avoided:

- 7 days at room temperature (18-25°C).
- 3 months at 2-8°C.
- 6 months at -20°C or below.

The stability of the reconstituted reagent should be checked under laboratory work conditions.

SYMBOLS:

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

REF

Catalog number

LOT

Batch code

EXP

Expiration date



Reconstitution volume



YYYY-MM-DD Use by



See instruction for use



Temperature limitation

Certificate of Analysis

5-ENZYME Factor Xa (Bovine)

Vial of 30 µg

REF 5D-60217

LOT XXX

EXP XXX

Store at 2-8°C

Analytical Data | Specifications

Protein Content (Lowry method):

42 | $\geq 25 \mu\text{g}/\text{vial}$

SDS-PAGE (4-12 % acrylamide):

55,000 daltons | 1 major band of about 55,000 daltons

Chromogenic activity: (on FXa substrate 10µg/mL)

| | | |
|--------------------------------|--|--------------------------------|
| A405 with RVV (RVV+) : 2.202 | | A405(RVV-) / A405 (RVV+) >0.90 |
| A405 without RVV (RVV-) : 2.15 | | |

Specific activity:

| | | | | | |
|----------|----------|-------|--|-------------|------------|
| | Nkats/µg | Nkats | | Nkats/µg | Nkats |
| 5D-30807 | 5.36 | 225 | | ≥ 4.80 | ≥ 150 |

Batch homogeneity:

N = 25 – CV : 2.63 % | CV(OD) $\leq 3\%$

Conclusions:

Date: XXX

☒ **Passed**
☐ **Refused**