

## New England Biolabs Certificate of Analysis

**Product Name:** Factor Xa Protease  
**Catalog Number:** P8010S  
**Concentration:** 1 mg/ml  
**Unit Definition:** 1 µg of Factor Xa will cleave 50 µg of MBP fusion protein test substrate, MBP-ΔSal to 95% completion in a total reaction volume of 50 µl in 6 hours or less at 23°C in 20 mM Tris-HCl (pH 8.0 @ 25°C) with 100 mM NaCl and 2 mM CaCl<sub>2</sub>.  
**Packaging Lot Number:** 10193218  
**Expiration Date:** 05/2025  
**Storage Temperature:** -20°C  
**Storage Conditions:** 500 mM NaCl, 20 mM HEPES, 2 mM CaCl<sub>2</sub>, 50% glycerol, (pH 8.0 @ 25°C)  
**Specification Version:** PS-P8010S/L v1.0

Factor Xa Protease Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
P8010SVIAL	Factor Xa Protease	10187144	Pass

Assay Name/Specification	Lot # 10193218
<b>Functional Testing (Factor Xa, Fusion Cleavage)</b> A 50 µl reaction in 1X Factor Xa Buffer containing Fusion: MBP – Factor Xa – Paramyosin Delta sal and a minimum of 1 µg of Factor Xa Protease incubated for 6 hours at 25°C results in ≥ 95% cleavage as determined by SDS-PAGE with Coomassie Blue detection.	Pass
<b>Protease Activity (Non-Specific, SDS-PAGE)</b> A 20 µl reaction in 1X Factor Xa Buffer containing 24 µg of a standard mixture of proteins and a minimum of 5 µg of Factor Xa Protease was incubated for 20 hours at 37°C. After incubation, no detectable degradation of the protein mixture was determined by SDS-PAGE with Coomassie Blue detection.	Pass

This product has been tested and shown to be in compliance with all specifications.

One or more products referenced in this document may be covered by a 3rd-party trademark. Please visit [www.neb.com/trademarks](http://www.neb.com/trademarks) for additional information.

*Emily Chen*

---

Emily Chen  
Production Scientist  
17 May 2023

*Michael Tonello*

---

Michael Tonello  
Packaging Quality Control Inspector  
18 May 2023