

## New England Biolabs Certificate of Analysis

**Product Name:** Factor Xa Protease  
**Catalog Number:** P8010L  
**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>.  
**Lot Number:** 10047788  
**Expiration Date:** 06/2021  
**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
P8010LVIAL	Factor Xa Protease	10047789	Pass

Assay Name/Specification	Lot # 10047788
<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.



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Brad Landgraf  
Production Scientist  
12 Jul 2019



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Michael Tonello  
Packaging Quality Control Inspector  
16 Jul 2019