

## New England Biolabs Product Specification

<i>Product Name:</i>	<i>Factor Xa Protease</i>
<i>Catalog #:</i>	<i>P8010S/L</i>
<i>Concentration:</i>	<i>1 mg/ml</i>
<i>Unit Definition:</i>	<i>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>.</i>
<i>Shelf Life:</i>	<i>24 months</i>
<i>Storage Temp:</i>	<i>-20°C</i>
<i>Storage Conditions:</i>	<i>500 mM NaCl, 20 mM HEPES, 2 mM CaCl<sub>2</sub>, 50% glycerol, (pH 8.0 @ 25°C)</i>
<i>Specification Version:</i>	<i>PS-P8010S/L v1.0</i>
<i>Effective Date:</i>	<i>19 Dec 2017</i>

### Assay Name/Specification (minimum release criteria)

**Functional Testing (Factor Xa, Fusion Cleavage)** - 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.

**Protease Activity (Non-Specific, SDS-PAGE)** - 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.



Date 19 Dec 2017

Derek Robinson  
Director of Quality Control

