

## New England Biolabs Certificate of Analysis

Product Name: PURExpress® Disulfide Bond Enhancer  
 Catalog Number: E6820S  
 Lot Number: 10016309  
 Expiration Date: 06/2020  
 Storage Temperature: -20°C  
 Specification Version: PS-E6820S v1.0

PURExpress® Disulfide Bond Enhancer Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
P6821AVIAL	PURExpress® Disulfide Bond Enhancer 1	10013579	Pass
B6822AVIAL	Enhancer 2	10013595	Pass

Assay Name/Specification	Lot # 10016309
<p><b>Functional Testing (Cell-Free Protein Synthesis Assay, vTPA)</b>            A 25 µl reaction in the presence of 250 ng vTPA (truncated tissue plasminogen activator) template plasmid DNA, 1 µl Enhancer 1, 1 µl Enhancer 2, and 20 units of RNase Inhibitor containing the components of the PURExpress® In Vitro Protein Synthesis Kit incubated for 2 hours at 37°C results in the expected 40 kDa product as determined by SDS-PAGE with Coomassie Blue detection.</p>	Pass
<p><b>Functional Testing (vTPA Activity Assay)</b>            Five (5) µl of PURExpress® vTPA protein synthesis reaction is incubated with 0.4 mM chromozym t-PA substrate in 100 mM Tris pH 8.0 and 0.15% Tween® 80 at 37°C for 1 hour. Absorbance readings at 405 nm are taken every 2 minutes in a kinetic assay. An increase in absorbance at 405 nm over time indicates the formation of 4-nitraniline as detected by spectrophotometric analysis.</p>	Pass

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

*Corinna Tuckey*

---

Andreas Schalk  
Production Scientist  
16 Jul 2018

---

Cory Tuckey  
Packaging Quality Control Inspector  
19 Jul 2018