

## New England Biolabs Product Specification

*Product Name:* PURExpress<sup>®</sup> In Vitro Protein Synthesis Kit  
*Catalog #:* E6800S/L  
*Kit Components:* PURExpress<sup>®</sup> Solution A (B0228)  
PURExpress<sup>®</sup> Solution B (P0760)  
PURExpress<sup>®</sup> Control (DHFR) template (N0424)  
*Shelf Life:* 24 months  
*Storage Temp:* -80°C  
*Specification Version:* PS-E6800S/L v1.0  
*Effective Date:* 13 Jun 2018

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

**Functional Testing (Cell Free Protein Synthesis Assay) (DHFR)** - A 25 µl reaction in the presence of 250 ng *E. coli* DHFR template DNA and 20 units RNase Inhibitor containing the components of the PURExpress<sup>®</sup> In Vitro Protein Synthesis Kit incubated for 2 hours at 37°C results in the expected 20 kDa product as determined by SDS-PAGE with Coomassie Blue detection.

**Functional Testing (Cell Free Protein Synthesis Assay) (Vent DNA Polymerase)** - A 25 µl reaction in the presence of 250 ng Vent DNA Polymerase template DNA and 20 units RNase Inhibitor containing the components of the PURExpress<sup>®</sup> In Vitro Protein Synthesis Kit incubated for 2 hours at 37°C results in the expected 89 kDa product as determined by SDS-PAGE with Coomassie Blue detection.

**Functional Testing (Cell Free Protein Synthesis Assay) (β-galactosidase)** - A 25 µl reaction in the presence of 250 ng β-galactosidase template DNA and 20 units RNase Inhibitor containing the components of the PURExpress<sup>®</sup> In Vitro Protein Synthesis Kit incubated for 2 hours at 37°C results in the expected 116 kDa product as determined by SDS-PAGE with Coomassie Blue detection.

**\* Individual Product Component Note** - Standard Quality Control Tests are performed for each component included in PURExpress<sup>®</sup> In Vitro Protein Synthesis Kit and meet the designated specifications.



Date 13 Jun 2018

Derek Robinson  
Director of Quality Control

