

## New England Biolabs Product Specification

*Product Name:* PURExpress<sup>®</sup>  $\Delta$  (aa, tRNA) Kit  
*Catalog #:* E6840S  
*Kit Components:* PURExpress<sup>®</sup> Solution A (-aa, tRNA) (B6841)  
PURExpress<sup>®</sup> Control DHFR Plasmid (N0424)  
PURExpress<sup>®</sup> E. coli tRNA (N6842)  
PURExpress<sup>®</sup> Amino Acid Mix (N6843)  
PURExpress<sup>®</sup> Solution B (P0760)  
*Shelf Life:* 24 months  
*Storage Temp:* -80°C  
*Specification Version:* PS-E6840S v2.0  
*Effective Date:* 19 Jan 2021

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

**Functional Testing (Cell Free Protein Synthesis Assay) (DHFR)** - A 25  $\mu$ l reaction in the presence of 250 ng PURExpress<sup>®</sup> Control DHFR Plasmid and 20 units RNase Inhibitor containing the components of the PURExpress<sup>®</sup>  $\Delta$  (aa, tRNA) 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  $\mu$ l 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>  $\Delta$  (aa, tRNA) 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) ( $\beta$ -galactosidase)** - A 25  $\mu$ l reaction in the presence of 250 ng  $\beta$ -galactosidase template DNA and 20 units RNase Inhibitor containing the components of the PURExpress<sup>®</sup>  $\Delta$  (aa, tRNA) 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>  $\Delta$  (aa, tRNA) Kit and meet the designated specifications.

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Date 19 Jan 2021

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