

New England Biolabs Product Specification

Product Name: NEBExpress[®] Cell-Free *E. coli* Protein Synthesis System
Catalog #: E5360S/L
Kit Components: NEBExpress[®] S30 Synthesis Extract (P0864)
Protein Synthesis Buffer (2X) (B0864)
RNase Inhibitor, Murine (M1018)
T7 RNA Polymerase (M1019)
NEBExpress[®] Control DHFR-His Plasmid (N3273)
Shelf Life: 24 months
Storage Temp: -80°C
Specification Version: PS-E5360S/L v2.0
Effective Date: 25 Jan 2021

Assay Name/Specification (minimum release criteria)

Functional Testing (Cell-Free Protein Synthesis Assay) (DHFR) - A 50 µl reaction in the presence of 250 ng NEBExpress[®] Control DHFR-His Plasmid containing the components of the NEBExpress[®] Cell-Free *E. coli* Protein Synthesis System incubated for 3 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) (vGFP, Fluorescence) - A 50 µl reaction in the presence of 250 ng *E. coli* vGFP template DNA containing the components of the NEBExpress[®] Cell-Free *E. coli* Protein Synthesis System incubated for 5 hours at 37°C results in the expected product as determined by a fluorescence signal ≥ 2 times higher than the reference standard signal.

Functional Testing (Cell-Free Protein Synthesis Assay) (vGFP, SDS-PAGE) - A 50 µl reaction in the presence of 250 ng *E. coli* vGFP template DNA containing the components of the NEBExpress[®] Cell-Free *E. coli* Protein Synthesis System incubated for 3 hours at 37°C results in the expected 28 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 NEBExpress[®] Cell-Free *E. coli* Protein Synthesis System and meet the designated specifications.

One or more products referenced in this document may be covered by a 3rd-party trademark.
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Date 25 Jan 2021

Derek Robinson
Director, Quality Control

