

New England Biolabs Product Specification

Product Name: Ph.D.[™] Peptide Display Cloning System
Catalog #: E8101S
Kit Components: M13KE gIII Cloning Vector (N3541)
M13KE Extension Primer (S1203)

Shelf Life: 24 months
Storage Temp: -20°C
Specification Version: PS-E8101S v1.0
Effective Date: 02 Oct 2018

Assay Name/Specification (minimum release criteria)

A260/A280 Assay - The ratio of UV absorption of M13KE gIII Cloning Vector at 260 and 280 nm is between 1.8 and 2.0.

DNA Concentration (A260) - The concentration of M13KE gIII Cloning Vector is between 1000 and 1050 µg/ml as determined by UV absorption at 260 nm.

Electrophoretic Pattern (Plasmid) - The banding pattern of M13KE gIII Cloning Vector on a 1.2% agarose gel is evaluated against a control lot for sharpness and relative intensity as determined by gel electrophoresis using Ethidium Bromide.

Functional Testing (PCR) - The performance of the Ph.D.[™] Peptide Display Cloning System is tested in a 25 µl PCR reaction using 1 ng M13KE gIII Cloning Vector as the substrate, 0.0125 nmol M13KE Extension Primer and 0.0125 nmol reverse primer (5-CCC ATG TAC CGT AAC ACT GAGTTTC-3) for 25 cycles of PCR resulting in the expected 194 bp product as determined by agarose gel electrophoresis.

Non-Specific DNase Activity (DNA, 16 hour) - A 50 µl reaction in 1X NEBuffer 2 containing 2.5 µg of M13KE gIII Cloning Vector incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.



Date 02 Oct 2018

Derek Robinson
Director of Quality Control

