

New England Biolabs Certificate of Analysis

Product Name: *Ph.D.[™]-7 Phage Display Peptide Library Kit*

Catalog #: *E8100S*

Kit Components: *Ph.D.[™]-7 Phage Display Peptide Library (E8102) — Store at -20°C*
-96 gIII Sequencing Primer (20-mer) (S1259) — Store at -20°C
-28 gIII Sequencing Primer (22-mer) (S1258) — Store at -20°C
E. coli K12 ER2738 (E4104) — Store at -80°C
Biotin (N7024) — Store at -20°C
Streptavidin, lyophilized (N7023) — Store at -20°C

Lot #: *0301801*

Assay Date: *01/2018*

Expiration Date: *01/2020*

Storage Temp: *Multi-temperature*

Specification Version: *PS-E8100S v1.0*

Effective Date: *18 Jun 2018*

Assay Name/Specification (minimum release criteria)	Lot #0301801
<p>Absolute Phage Titer - Infection of a mid-log culture of <i>E. coli</i> ER2738 with Ph.D.[™]-7 Phage Display Peptide Library followed by plating, yields $\geq 1 \times 10^{13}$ pfu/ml.</p>	Pass
<p>Functional Testing (Panning) - A 100-fold representation of the Ph.D.[™]-7 Phage Display Peptide Library containing approximately 10^{11} pfu is diluted in 200 μl TBS and panned against 300 ng β-endorphin monoclonal antibody. The bound phage is affinity captured using magnetic beads and eluted with 1 ml of 0.2M Glycine-HCl, pH 2.2. After three rounds of selection, $\geq 75\%$ of sequences contain a motif related to the known epitope for the antibody.</p>	Pass
<p>Phage Contamination (Environmental) - A 1:100 dilution of an overnight culture of <i>E. coli</i> ER2738 was made in 20 ml LB, to which 10^5 pfu of Ph.D.[™]-7 Phage Display Peptide Library was added. The flask was incubated at 37°C on a rotating shaker for 5 hours. A 1 ml volume of culture was removed and centrifuged. Five microliters (5 μl) of phage-containing supernatant was used for three successive rounds of amplification. The final culture supernatant was plated on three LB/IPTG/Xgal plates and then titered. Fewer than 5% clear or white plaques were observed in a minimum of 100 total plaques counted on each plate.</p>	Pass



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Assay Name/Specification (minimum release criteria)	Lot #0301801
Sequence Verification (DNA) - The Ph.D. [™] -7 Phage Display Peptide Library was sequenced using 5'-CCCATGTACCGTAACACTGAGTTTC-3' as a primer to confirm the correct form of the cloned insert on the displayed peptide, X ₇ -GGG.	Pass



Authorized by
Derek Robinson
18 Jun 2018



Inspected by
Beth Paschal
02 Jan 2018

