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New England Biolabs Certificate of Analysis

Product Name: Ph.D.™-C7C Phage Display Peptide Library Kit

Catalog Number: E8120S
Packaging Lot Number: 10062662
Expiration Date: 09/2021
Storage Temperature: -20°C

Specification Version: PS-E8120S v2.0

Ph.D.™-C7C Phage Display Peptide Library Kit Component List				
NEB Part Number	Component Description	Lot Number	Individual QC Result	
S1259AVIAL	-96 glll Sequencing Primer (20-mer)	10043734	Pass	
S1258AVIAL	-28 glll Sequencing Primer (22-mer)	10043733	Pass	
N7024AVIAL	Biotin	10043732	Pass	
N7023AVIAL	Streptavidin, lyophilized	10060978	Pass	
E8121AVIAL	Ph.D.™-C7C Phage Display Peptide Library	10054204	Pass	
E4104SVIAL	E.coli K12 ER2738	10034478	Pass	

Assay Name/Specification	Lot # 10062662
Functional Testing (Panning) A 100-fold representation of the Ph.D.™-C7C Phage Display Peptide Library containing approximately 1011 pfu is diluted in 200 µl TBS and panned against 300 ng of anti-FLAG® 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, ≥75% of sequences contain a motif related to the known epitope for the antibody.	Pass
Absolute Phage Titer Infection of a mid-log culture of E. coli ER2738 with Ph.D.™-C7C Phage Display Peptide Library followed by plating, yields ≥ 1 x 101³ pfu/ml.	Pass
Phage Contamination (Environmental) A 1:100 dilution of an overnight culture of E. coli ER2738 was made in 20 ml LB, to which 10³ pfu of Ph.D.™-C7C 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. A volume of culture supernatant equivalent to the initial PFU input was added to a second, 20 ml culture like the first. The final culture supernatant was plated on three LB/IPTG/Xgal plates and then titered. Fewer than 20% clear or white plaques were observed in a minimum of 100 total plaques counted on	Pass



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each plate.	
Sequence Verification (DNA) The Ph.D.™-C7C 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, ACX7C-GGG.	Pass

This product has been tested and shown to be in compliance with all specifications.

Beth M. Paschel

Beth Paschal Production Scientist 10 Sep 2019 Michael Tonello

Packaging Quality Control Inspector

23 Jan 2020

