

## New England Biolabs Certificate of Analysis

Product Name: M13K07 Helper Phage  
 Catalog Number: N0315S  
 Concentration: 1 x10e11 pfu/ml  
 Lot Number: 10041829  
 Expiration Date: 05/2021  
 Storage Temperature: -20°C  
 Storage Conditions: 1X PBS, 50% Glycerol  
 Specification Version: PS-N0315S v1.0

M13K07 Helper Phage Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
N0315SVIAL	M13K07 Helper Phage	10041831	Pass

Assay Name/Specification	Lot # 10041829
<b>Absolute Phage Titer</b> Infection of a mid-log culture of E. coli ER2690 with M13K07 Helper Phage followed by plating, yields $\geq 1 \times 10^{11}$ pfu/ml.	Pass
<b>Functional Testing (Helper Ratio)</b> Superinfection of an early-log culture of E. coli ER2738/pLITMUS 38 with $3 \times 10^8$ pfu/ml M13K07, followed by incubation for 18 hours in the presence of 70 $\mu\text{g}$ /ml kanamycin yields > 10-fold excess of packaged phagemid DNA over helper phage.	Pass
<b>Viable Cell Titer</b> Plating a 300 $\mu\text{l}$ suspension of M13K07 Helper Phage for viable cells on LB agar yields a titer of $<1 \times 10^2$ cfu/ml.	Pass

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

*Beth M. Paschal*

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Beth Paschal  
Production Scientist  
09 May 2019

*Michael Tonello*

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Michael Tonello  
Packaging Quality Control Inspector  
10 May 2019