

## New England Biolabs Certificate of Analysis

**Product Name:** M13K07 Helper Phage  
**Catalog Number:** N0315S  
**Concentration:** 1 x10e11 pfu/ml  
**Packaging Lot Number:** 10235827  
**Expiration Date:** 11/2025  
**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	10212183	Pass

Assay Name/Specification	Lot # 10235827
<b>Absolute Phage Titer</b> Infection of a mid-log culture of E. coli ER2690 with M13KO7 Helper Phage followed by plating, yields $\geq 1 \times 10^{11}$ pfu/ml.	<b>Pass</b>
<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 M13KO7, 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.	<b>Pass</b>
<b>Viable Cell Titer</b> Plating a 300 $\mu\text{l}$ suspension of M13KO7 Helper Phage for viable cells on LB agar yields a titer of $<1 \times 10^2$ cfu/ml.	<b>Pass</b>

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

One or more products referenced in this document may be covered by a 3rd-party trademark. Please visit [www.neb.com/trademarks](http://www.neb.com/trademarks) for additional information.

*Beth M. Paschal*

---

Beth Paschal  
Production Scientist  
29 Nov 2023

*Michael Tonello*

---

Michael Tonello  
Packaging Quality Control Inspector  
16 May 2024