

## New England Biolabs Certificate of Analysis

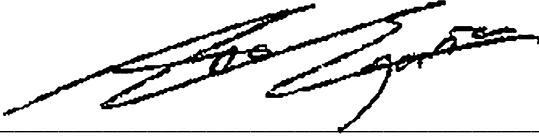
Product Name: Q5® Site-Directed Mutagenesis Kit  
 Catalog Number: E0554S  
 Packaging Lot Number: 10079312  
 Expiration Date: 07/2021  
 Storage Temperature: Multi-temperature\*  
 Specification Version: PS-E0554S v2.0

\* This product contains components with different storage temperature requirements. Please reference the applicable product specification document(s) on the Quality and Safety tab located on the product page of [www.neb.com](http://www.neb.com).

Q5® Site-Directed Mutagenesis Kit Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
S0554AVIAL	Control SDM Primer Mix	10075156	Pass
N3041AVIAL	pUC19 Vector	10066466	Pass
N0554AVIAL	Control SDM Plasmid	10075155	Pass
M0554AVIAL	KLD Enzyme Mix	10075594	Pass
M0494AVIAL	Q5® Hot Start High-Fidelity 2X Master Mix	10076728	Pass
C2987HVIAL	NEB® 5-alpha Competent E. coli (High Efficiency)	10067305	Pass
B9020SVIAL	SOC Outgrowth Medium	10062409	Pass
B0554AVIAL	KLD Reaction Buffer	10075153	Pass

Assay Name/Specification	Lot # 10079312
<p><b>* Individual Product Component Note</b>            Standard Quality Control Tests are performed for each component included in Q5 Site-Directed Mutagenesis Kit and meet the designated specifications.</p>	Pass
<p><b>Functional Testing (Mutagenesis Kit)</b>            A 10 µl reaction containing 1 µl of PCR product (10 ng of Control SDM plasmid, amplified with Control SDM Primer Mix, with 25 cycles in Q5 Hot Start High-Fidelity Master Mix), 1 µl 10X KLD Enzyme Mix, 5 µl 2X KLD Reaction Buffer and 3 µl of nuclease-free water for 5 minutes at room temperature yields &gt;50 colonies with &gt;75% blue after transforming 5 µl into 50 µl NEB 5-alpha Chemically Competent Cells and making a 40-fold dilution prior to plating.</p>	Pass

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



Ana Egana  
Production Scientist  
15 Jul 2020



Nick Privitera  
Packaging Quality Control Inspector  
15 Jul 2020