240 County Road Ipswich, MA 01938-2723 Tel 978-927-5054 Fax 978-921-1350 www.neb.com info@neb.com

## New England Biolabs Certificate of Analysis

Product Name: Q5® Site-Directed Mutagenesis Kit

Catalog Number: E0554S
Lot Number: 10015498
Expiration Date: 06/2019

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.

Q5® Site-Directed Mutagenesis Kit Component List				
<b>NEB Part Number</b>	Component Description	Lot Number	Individual QC Result	
S0554AVIAL	Control SDM Primer Mix	0101712	Pass	
N3041AVIAL	pUC19 Vector	10010689	Pass	
N0554AVIAL	Control SDM Plasmid	0011712	Pass	
M0554AVIAL	KLD Enzyme Mix	0121712	Pass	
M0494AVIAL	Q5® Hot Start High-Fidelity 2X Master Mix	0251712	Pass	
C2987HVIAL	NEB® 5-alpha Competent E. coli (High Efficiency)	10013103	Pass	
B9020SVIAL	SOC Outgrowth Medium	5691805	Pass	
B0554AVIAL	KLD Reaction Buffer	0011712	Pass	

Assay Name/Specification	Lot # 10015498
Functional Testing (Mutagenesis Kit)  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 >50 colonies with >75% blue after transforming 5 µl into 50 µl NEB 5-alpha Chemically Competent Cells and making a 40-fold dilution prior to plating.	Pass
* Individual Product Component Note Standard Quality Control Tests are performed for each component included in Q5 Site-Directed Mutagenesis Kit and meet the designated specifications.	Pass

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



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Production Scientist 29 Jun 2018

Nick Privitera

Packaging Quality Control Inspector

19 Jul 2018