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
Packaging Lot Number: 10155355
Expiration Date: 05/2023

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			
NEB Part Number	Component Description	Lot Number	Individual QC Result
S0554AVIAL	Control SDM Primer Mix	10138576	Pass
N3041AVIAL	pUC19 Vector	10146225	Pass
N0554AVIAL	Control SDM Plasmid	10138575	Pass
M0554AVIAL	KLD Enzyme Mix	10138573	Pass
M0494AVIAL	Q5® Hot Start High-Fidelity 2X Master Mix	10138572	Pass
C2987HVIAL	NEB® 5-alpha Competent E. coli (High Efficiency)	10135687	Pass
B9020SVIAL	SOC Outgrowth Medium	10150401	Pass
B0554AVIAL	KLD Reaction Buffer	10138578	Pass

Assay Name/Specification	Lot # 10155355
* Individual Product Component Note	Pass
Standard Quality Control Tests are performed for each component included in Q5	
Site-Directed Mutagenesis Kit and meet the designated specifications.	
Functional Testing (Mutagenesis Kit)	Pass
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.	

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



E0554S / Lot: 10155355 Page 1 of 2



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

Ana Egana Production Scientist

29 Jun 2022

Nick Privitera

Packaging Quality Control Inspector

29 Jun 2022



E0554S / Lot: 10155355 Page 2 of 2