

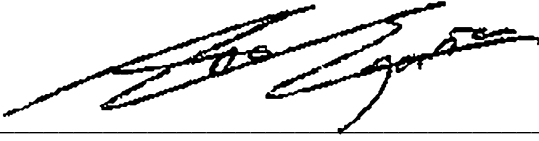
## New England Biolabs Certificate of Analysis

Product Name: Q5® Site-Directed Mutagenesis Kit (Without Competent Cells)  
 Catalog Number: E0552S  
 Lot Number: 10008841  
 Expiration Date: 12/2019  
 Storage Temperature: -20°C  
 Specification Version: PS-E0552S v1.0

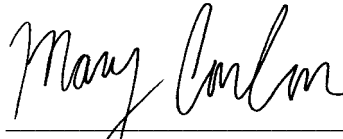
Q5® Site-Directed Mutagenesis Kit (Without Competent Cells) Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
S0554AVIAL	Control SDM Primer Mix	0101712	Pass
N0554AVIAL	Control SDM Plasmid	0011712	Pass
M0554AVIAL	KLD Enzyme Mix	0121712	Pass
M0494AVIAL	Q5® Hot Start High-Fidelity 2X Master Mix	0251712	Pass
B0554AVIAL	KLD Reaction Buffer	0011712	Pass

Assay Name/Specification	Lot # 10008841
<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
<p><b>* Individual Product Component Note</b>            Standard Quality Control Tests are performed for each component included in Q5 Site-Directed Mutagenesis Kit (Without Competent Cells) and meet the designated specifications.</p>	Pass

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



Ana Egana  
Production Scientist  
24 May 2018



Mary Conlon  
Packaging Quality Control Inspector  
24 May 2018