

## New England Biolabs Certificate of Analysis

Product Name: Q5<sup>®</sup> Site-Directed Mutagenesis Kit (Without Competent Cells)  
 Catalog Number: E0552S  
 Packaging Lot Number: 10057716  
 Expiration Date: 04/2021  
 Storage Temperature: -20°C  
 Specification Version: PS-E0552S v1.0

| Q5 <sup>®</sup> Site-Directed Mutagenesis Kit (Without Competent Cells) Component List |   |            |                      |
|--|---|------------|----------------------|
| NEB Part Number  | Component Description                                 | Lot Number | Individual QC Result |
| S0554AVIAL   | Control SDM Primer Mix                                | 10052076   | Pass                 |
| N0554AVIAL   | Control SDM Plasmid                                   | 10052075   | Pass                 |
| M0554AVIAL   | KLD Enzyme Mix  | 10052071   | Pass                 |
| M0494AVIAL   | Q5 <sup>®</sup> Hot Start High-Fidelity 2X Master Mix | 10052072   | Pass                 |
| B0554AVIAL   | KLD Reaction Buffer                                   | 10052074   | Pass                 |

| Assay Name/Specification  | Lot # 10057716 |
|---|----------------|
| <p><b>* Individual Product Component Note</b><br/>           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           |
| <p><b>Functional Testing (Mutagenesis Kit)</b><br/>           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.



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Doreen Duquette  
Production Scientist  
26 Sep 2019



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Michael Tonello  
Packaging Quality Control Inspector  
18 Nov 2019