

## New England Biolabs Certificate of Analysis

**Product Name:** Q5® Site-Directed Mutagenesis Kit  
**Catalog Number:** E0554S  
**Packaging Lot Number:** 10103719  
**Expiration Date:** 04/2022  
**Storage Temperature:** Multi-temperature\*  
**Specification Version:** PS-E0554S v2.0

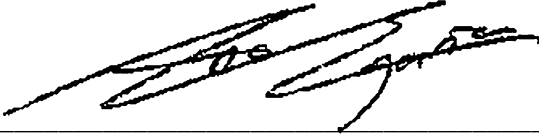
\* This product contains components with different storage temperature requirements. Please reference the applicable product specification document(s) on the Quality and Safety tab located on the product page of [www.neb.com](http://www.neb.com).

| Q5® Site-Directed Mutagenesis Kit Component List |  |            |                      |
|--|--|------------|----------------------|
| NEB Part Number                                  | Component Description                            | Lot Number | Individual QC Result |
| S0554AVIAL                                       | Control SDM Primer Mix                           | 10091653   | Pass                 |
| N3041AVIAL                                       | pUC19 Vector                                     | 10095954   | Pass                 |
| N0554AVIAL                                       | Control SDM Plasmid                              | 10091652   | Pass                 |
| M0554AVIAL                                       | KLD Enzyme Mix                                   | 10091649   | Pass                 |
| M0494AVIAL                                       | Q5® Hot Start High-Fidelity 2X Master Mix        | 10091651   | Pass                 |
| C2987HVIAL                                       | NEB® 5-alpha Competent E. coli (High Efficiency) | 10100130   | Pass                 |
| B9020SVIAL                                       | SOC Outgrowth Medium                             | 10093863   | Pass                 |
| B0554AVIAL                                       | KLD Reaction Buffer                              | 10091650   | Pass                 |

| Assay Name/Specification   | Lot # 10103719 |
|--|----------------|
| <p><b>* Individual Product Component Note</b><br/>Standard Quality Control Tests are performed for each component included in Q5 Site-Directed Mutagenesis Kit and meet the designated specifications.</p>   | <b>Pass</b>    |
| <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> | <b>Pass</b>    |

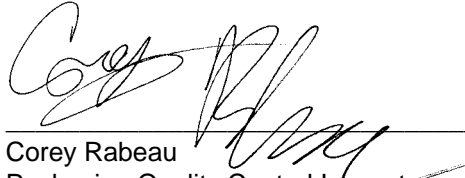
This product has been tested and shown to be in compliance with all specifications.

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



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01 Apr 2021



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