

New England Biolabs Certificate of Analysis

Product Name: Q5® Site-Directed Mutagenesis Kit
Catalog Number: E0554S
Packaging Lot Number: 10238789
Expiration Date: 04/2025
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 | 10221182 | Pass |
| N3041AVIAL | pUC19 Vector | 10226553 | Pass |
| N0554AVIAL | Control SDM Plasmid | 10221181 | Pass |
| M0554AVIAL | KLD Enzyme Mix | 10221179 | Pass |
| M0494AVIAL | Q5® Hot Start High-Fidelity 2X Master Mix | 10221178 | Pass |
| C2987HVIAL | NEB® 5-alpha Competent E. coli (High Efficiency) | 10214243 | Pass |
| B9020SVIAL | SOC Outgrowth Medium | 10202700 | Pass |
| B0554AVIAL | KLD Reaction Buffer | 10219318 | Pass |

| Assay Name/Specification | Lot # 10238789 |
|--|----------------|
| <p>* 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.</p> | Pass |
| <p>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.</p> | Pass |

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



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Production Scientist
16 Feb 2024



Nick Privitera
Packaging Quality Control Inspector
06 May 2024