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New England Biolabs Certificate of Analysis

Product Name: Q5® Site-Directed Mutagenesis Kit (Without Competent Cells)

Catalog Number: E0552S
Packaging Lot Number: 10242786
Expiration Date: 01/2026
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	10221182	Pass	
N0554AVIAL	Control SDM Plasmid	10221181	Pass	
M0554AVIAL	KLD Enzyme Mix	10221179	Pass	
M0494AVIAL	Q5® Hot Start High-Fidelity 2X Master Mix	10221178	Pass	
B0554AVIAL	KLD Reaction Buffer	10219318	Pass	

Assay Name/Specification	Lot # 10242786
* Individual Product Component Note	Pass
Standard Quality Control Tests are performed for each component included in Q5	
Site-Directed Mutagenesis Kit (Without Competent Cells) 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.

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.



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Lea Antonopoulos

Production Scientist 05 Feb 2024

Josh Hersey Packaging Quality Control Inspector 23 May 2024

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