Q5® Site-Directed Mutagenesis Kit

NOW AVAILABLE AT MEDSTORE

30% OFF

Expires Sept 30th, 2023

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

#E0552S - 10 reactions

~~$213~~ **$149.10**

Q5® Site-Directed Mutagenesis Kit

#E0554S - 10 reactions

~~$310~~ **$216.99**

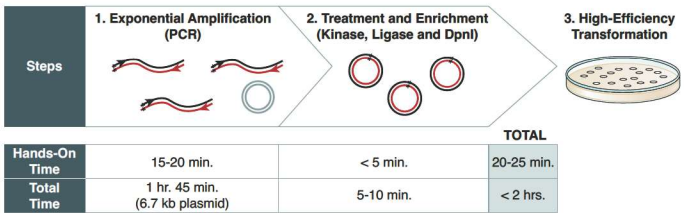
KLD Enzyme Mix

#M0554S - 25 reactions

~~$493~~ **$345.10**

The Q5 Site-Directed Mutagenesis Kit (Without Competent Cells) enables rapid, site-specific mutagenesis of double-stranded plasmid DNA in less than 2 hours (Figure 1). The kit utilizes the robust Q5 Hot Start High-Fidelity DNA Polymerase along with custom mutagenic primers to create insertions, deletions and substitutions in a wide variety of plasmids. After PCR, the amplified material is added directly to a unique Kinase-Ligase-DpnI (KLD) enzyme mix for rapid (5 minutes), room temperature circularization and template removal (Figure 2). Transformation into high-efficiency chemically-competent *E. coli*, not supplied, ensures robust results with plasmids up to at least 20 kb in length. Kit is available with competent cells (NEB #E0554)

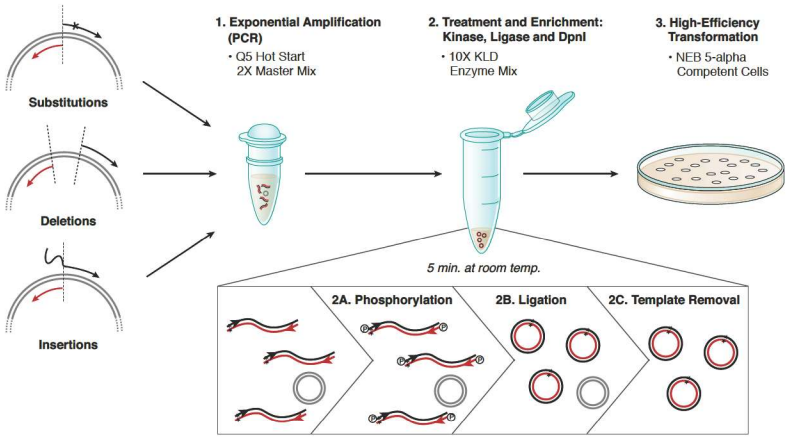
Figure 1: Site-specific mutagenesis proceeds in less than 2 hours



			TOTAL
Hands-On Time	15-20 min.	< 5 min.	20-25 min.
Total Time	1 hr. 45 min. (6.7 kb plasmid)	5-10 min.	< 2 hrs.

The use of a master mix, a unique multi-enzyme KLD enzyme mix, and a fast polymerase ensures that, for most plasmids, the mutagenesis reaction is complete in less than two hours.

Figure 2: Q5 Site-Directed Mutagenesis Kit Overview



This kit is designed for rapid and efficient incorporation of insertions, deletions and substitutions into double-stranded plasmid DNA. The first step is an exponential amplification using standard primers and a master mix formulation of Q5 Hot Start High-Fidelity DNA Polymerase. The second step involves incubation with a unique enzyme mix containing a kinase, a ligase and DpnI. Together, these enzymes allow for rapid circularization of the PCR product and removal of the template DNA. The last step is a high-efficiency transformation into chemically competent cells (provided).

NEBaseChanger™

NEBaseChanger can be used to design primers specific to the mutagenesis experiment you are performing, using the Q5 Site-Directed Mutagenesis Kit. This tool will also calculate a recommended custom annealing temperature based on the sequence of the primers by taking into account any mismatches.

To access this webtool, visit NEBaseChanger.neb.com

*TERMS & CONDITIONS: Offer valid in Canada only. Expires Sept 30th, 2023. Discount is eligible for products listed on this flyer. Promotion not valid for cash or cash equivalent towards purchase(s). No substitutions. Offer may not be applied to existing, pending or prior orders. Cannot be combined with any other promotion or discount. One or more of these products are covered by patents, trademarks and/or copyrights owned or controlled by New England Biolabs, Inc. For more information, please email us at orders.ca@neb.com

Howard Cukier, Ph.D.
Regional Manager, Ontario and Manitoba
Cell: (416) 527-2352
hcukier@neb.com

Nicholas Prevedel, MSc.
Associate Field Sales Representative, Ontario and Manitoba
Cell: (437) 431-8820
nprevedel@neb.com

Cell Signaling TECHNOLOGY®

NEW ENGLAND BioLabs Ltd.

New England Biolabs Ltd. is the exclusive Canadian distributor for Cell Signaling Technology, Inc. New England Biolabs Ltd. Tel: 1-800-387-1095 | Fax: 1-800-563-3789 | info.ca@neb.com | www.neb.ca