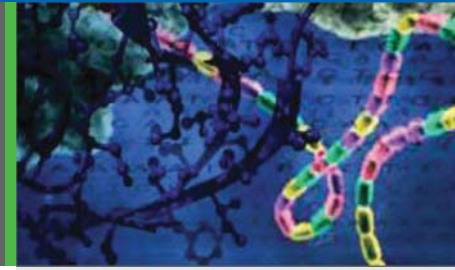


MetaMorph Mutagenesis Kit

Beautiful Modifications Made Simple

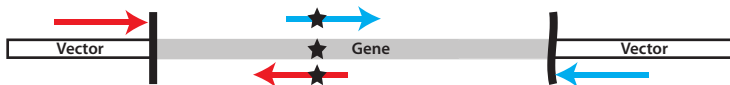


Simple, Rapid, and Highly Efficient PCR-Based Mutagenesis Kit

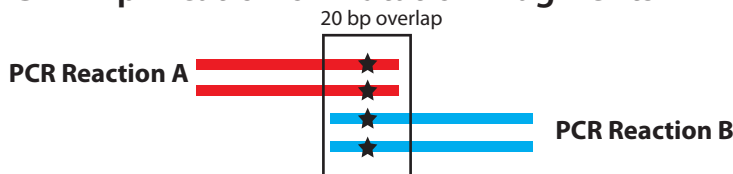
MetaMorph is a mutagenesis kit based on mutagenic PCR fragments that are generated with a high-fidelity DNA polymerase, custom-designed mutagenic primers and vector primers. The mutagenic primers are designed to incorporate single or multiple mutations, insertions, or deletions. Vector primers are designed to have 20 bp homology to the linearized vector ends. The mutagenic PCR fragments fuse to create the final mutated gene-of-interest. The kit is so robust that multiple mutagenic DNA fragments can be assembled simultaneously and cloned into one construct in a single step. MetaMorph is more than 90% efficient, without unwanted mutations being introduced.

Easy One-Day Protocol

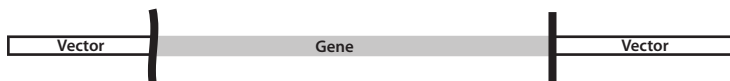
1 Primer Design



2 PCR Amplification of Mutation Fragments



Cut Original Vector at the Restriction Site
(Gene insert will be cut out)



3 MetaMorph of Mutated PCR Products and Vector



4 Transformation of any competent *E. coli* strain

Highlights

- Create single or multiple mutations simultaneously
- Introduce point mutations, deletions, or insertions
- No limit on the size of deletions or insertions
- Works with any vector
- Methylation-independent
- Ability to use any strain of competent *E. coli*
- Does not introduce unwanted mutations

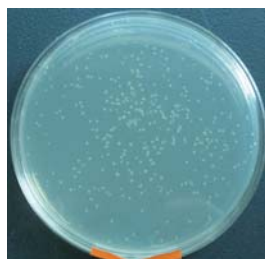
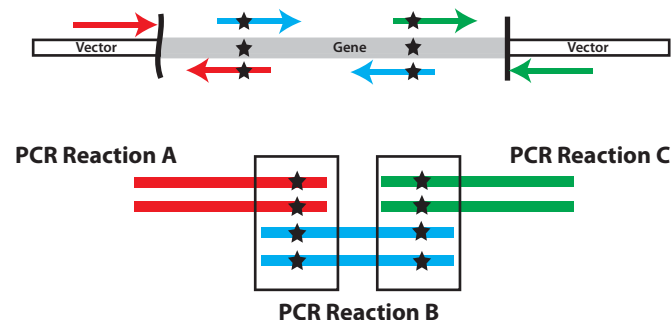
**Single & Multiple
Mutations, Deletions,
and Insertions**



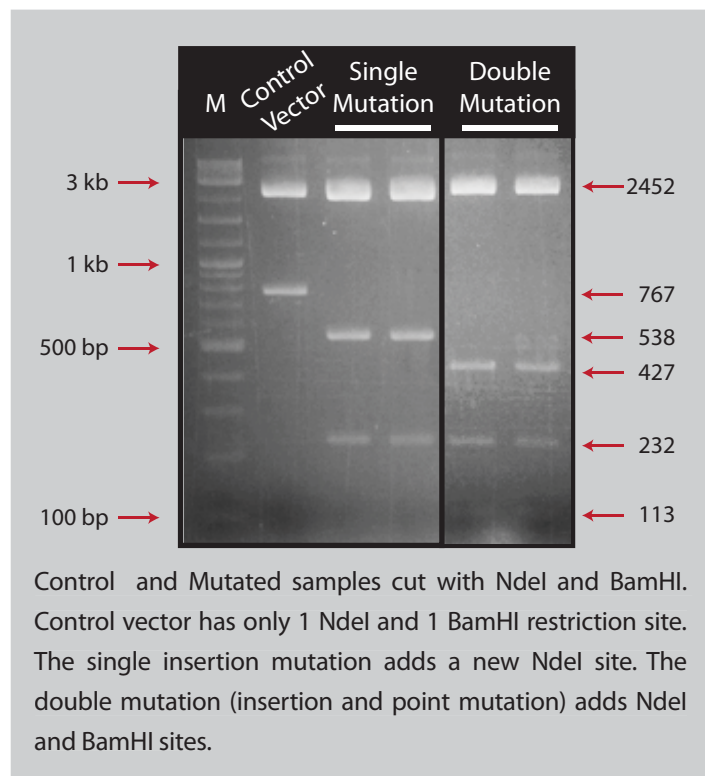
Beautiful modifications made simple.

MetaMorph Mutagenesis Kit

Generate Single and Multiple Mutations

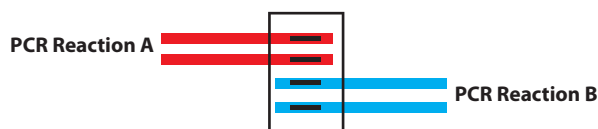
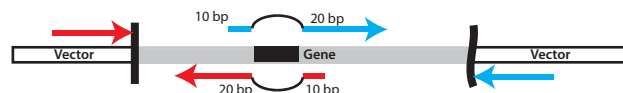


More than 90% positive clones obtained, without unwanted mutations



Deletions and Insertions

Generating all types of mutations is easy and efficient with the MetaMorph Mutagenesis Kit. There is no limit on the size of the insertions included in the mutagenic primers, or on the size of a region to be deleted from a construct.



Kit Components (Cat. # MC200)

SBI includes competent cells in the MetaMorph Mutagenesis Kit as a convenience. MetaMorph is compatible with all competent strains of *E. coli*.

Kit Component	10 Reactions
High Fidelity DNA Polymerase	5 μ l
5x PCR Buffer	100 μ l
Control primer 1 (10 μ M)	25 μ l
Control Primer 2 (10 μ M)	25 μ l
Control Primer 3 (10 μ M)	25 μ l
Control Primer 4 (10 μ M)	25 μ l
Control Primer 5 (10 μ M)	25 μ l
Control Primer 6 (10 μ M)	25 μ l
Control Plasmid (0.5 mg/ml)	10 μ l
dNTP mix (10mM)	10 μ l
5x MetaMorph Solution	20 μ l
Competent Cells	10 vials

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