Certificate of Analysis

TOPO TA Cloning® Kit Dual Promoter (Cloning Reagents)

Product No. 450640
Lot No. 2264169
Date of Manufacture 11Nov2020

Restriction Enzyme Analysis

The parental supercoiled vector, pCR®II is qualified by restriction digest to confirm its identity prior to linearization and adaptation with topoisomerase I. Restriction digests must demonstrate the correct banding pattern when electrophoresed on an agarose gel. The table below lists the restriction enzymes and the expected fragments.

Restriction Enzyme	Expected Fragments
Hind III	3932 bp (linearize)
Xba I	3932 bp (linearize)
Nsi I	3836 bp, 96 bp
Pst I	2765 bp, 1167 bp

Results: Meets Specification

TOPO® Cloning of Test PCR Product

Each lot is qualified using control reagents included in the kit. Under conditions described in the accompanying manual, a 750 bp control PCR product is amplified and TOPO® Cloned into pCR®II-TOPO® vector and subsequently transformed into the One Shot® competent E. *coli* included with the kit. The following results must be obtained:

1) pCR®II-TOPO® and control PCR product ligation: $\geq$ 92% white transformants
2) $\geq$ 90% of the white transformants from 1) contain pCR®II-TOPO® with a cloned test PCR product

Results: Meets Specification

Sequencing Primers

Sequencing primers are lot-qualified by DNA sequencing experiments using the dideoxy chain termination technique. Each primer must yield $\geq$ 250 bp of quality sequence from a supercoiled plasmid template using standard sequencing conditions.

Results: Meets specification

For Research Use Only. Not for use in diagnostic procedures. If you have any further questions about this Certificate of Analysis, please contact Technical Services at 1-800-955-6288 (US and Canada) or 1-760-603-7200, x2 (all other

countries).

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