

User Manual

Version 3.0

Product name: Exonuclease III (*E. coli*)

Cat #: EIII-100, EIII-200, EIII-OEM, B-YB10

Description:

Exonuclease III (*E. coli*) is a 3' → 5' exonuclease which acts by digesting one strand of a dsDNA duplex at a time or digesting the RNA strand of an RNA-DNA heteroduplex. Exonuclease III (*E. coli*) breaks phosphodiester bonds on the 5'-side of AP sites in both dsDNA and ssDNA. It removes 3'-terminal groups on dsDNA, increases MutY turnover, and efficiently degrades 3'-recessed but not 3' protruding DNA ends (creating 5'-overhangs). Exonuclease III (*E. coli*) removes a limited number of nucleotides per binding event, resulting in coordinated progressive deletions within the population of DNA molecules.

Protocol:

Set up the following reaction:

DNA up to 1 µg
10X Yellow Buffer 5 µl
Exonuclease III, *E. coli* 0.5 µl (50 units)
H₂O up to 50 µl

Incubate at 37°C for 1-4 hr

Heat inactivate at 75°C for 10 min