

User Manual

Version 3.0

Product name: APE1

Cat #: APE-100, APE-200, APE-OEM, B-GB10

Description:

APE1, also known as HAP1 or Ref-1, acts as an AP lyase by hydrolyzing the phosphodiester backbone at the 5'-end of an apurinic (AP) site, generating a 1 base gap in the DNA duplex and leaving 3'-hydroxyl and 5'-deoxyribose phosphate termini. Evidence suggests that APE1 may exhibit weak DNA 3'-diesterase, 3' to 5'-exonuclease and RNase H activities.

Unit Definition:

One unit is defined as the amount of enzyme required to cleave 20 pmol of a 34 mer oligonucleotide duplex containing a single AP site* in a total reaction volume of 10 μ l in 1 hour at 37°C.

*An AP site is created by treating 20 pmol of a 34 mer oligonucleotide duplex containing a single uracil residue with 1 unit of Uracil-DNA Glycosylase (UDG) for 2 minutes at 37°C.