

Restriction  
Endonuclease



# Apa I

Recognition  
Sequence:

GGGCC↓C  
C↑CCGGG

**S** **E019T**  
100 reactions  
100 µl

Lot:  
Exp:  
**Store at -20°C**

37°C 65°C TURBO λ/BamHI RR Dcm

For more details  
scan the code



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## CERTIFICATE OF ANALYSIS

### Enzymes Properties:

1 µl of Turbo Apa I cuts 1 µg of DNA in 1x SE-Buffer ROSE in 10 min (assayed on Lambda DNA (dcm-)/Bam HI and plasmid DNA (dcm-)). A short time of DNA digestion requires high quality purification of DNA sample (PCR fragments should be purified after amplification).

Please note that supercoiled plasmid DNA and PCR fragments may have varying rates of cleavage and sometimes need more time to be completely digested.

### Standard protocol of Turbo reaction:

20 µl of the reaction volume:  
10x SE-Buffer ROSE - 2 µl  
DNA - 0.2-1 µg  
Nuclease-free water - to 20 µl  
+ 1 µl of Turbo Apa I

Mix by pipette tip carefully.  
Incubate at 37°C for 10 min.

Description: Turbo Apa I is used for short time (10 min) DNA digestion in universal (ROSE) SE-Buffer.

Source: An *E. coli* strain that carries the cloned Apa I gene from *Acetobacter pasteurianus*.

### Supplied in:

10 mM Tris-HCl (pH 7.5); 200 mM NaCl; 0.1 mM EDTA;  
7 mM 2-mercaptoethanol; 200 µg/ml BSA;  
50% glycerol.

### Reaction Conditions:

1x SE-Buffer ROSE. Incubate at 37°C.

Reaction Original SibEnzyme (ROSE) Buffer is a specially designed universal reaction buffer for the most Restriction Endonucleases. ROSE Buffer is perfect for DNA cleavage with SE Turbo Restriction Endonucleases and for double digestion.

### Heat Inactivation:

Enzyme is inactivated by incubation at 65 °C for 20 minutes.

### Quality Control Assays

Ligation : After digestion with 1 µl of Turbo Apa I, approximately 95% of the DNA fragments can be ligated with high-activity T4 DNA Ligase and recut.

Oligonucleotide Assay: No detectable degradation of a single-stranded and double-stranded oligonucleotide was observed after incubation with 1 µl of restriction endonuclease for 3 hours.

### Reagents Supplied with Enzyme:

10x SE Buffer ROSE.

### Applications:

- Fast DNA analysis
- Fast preparation of vectors for cloning
- Double digestion