Restriction Endonuclease

SibEnzyme®

# Acc65 I

Recognition Sequence: G↓GTACC
CCATG↑G

S E003T
1,000 units
20,000 u/ml

Lot:
Exp:
Store at -20C

| SE-Buffers | B | G | O | W | Y | ROSE |
|---|---|---|---|---|---|---|
| %Activity | 10-25 | 25-50 | 75-100 | 100 | 10-25 | 100 |

37°C | 65°C | W | λ | Dcm | TURBO

For more details scan the code

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# CERTIFICATE OF ANALYSIS

Description: Turbo Acc65 I can be used for short time (10 min) DNA digestion as well as for standard reaction. The reaction can be performed using optimal or universal (ROSE) Buffer. Buffer ROSE is perfect for double digestion.

Source: *Acinetobacter calcoaceticus 65*

Supplied in: 10 mM Tris-HCl (pH 7.5), 50 mM KCl, 0.1 mM EDTA, 7 mM 2-mercaptoethanol, 200 µg/ml BSA, 50% glycerol.

Reaction Conditions:
1 x SE-Buffer W or 1 x SE-Buffer ROSE.
Incubate at 37°C.

1 x SE-Buffer W (pH 8.5@ 25°):
10 mM Tris-HCl 100 mM NaCl
10 mM $MgCl_2$ 1 mM DTT

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

Unit Definition: One unit is defined as the amount of enzyme required to digest 1 µg of λ DNA in 1 hour at 37°C in a total reaction volume of 50 µl.

Quality Control Assays
Ligation: After 20-fold overdigestion with Acc65 I, >90% of the DNA fragments can be ligated with T4 DNA Ligase and recut.
16-Hour Incubation: A 50 µl reaction containing 1 µg of DNA and 40 units of enzyme incubated for 16 hours resulted in the same pattern of DNA bands as a reaction incubated for 1 hour.
Oligonucleotide Assay: No detectable degradation of a single-stranded and double-stranded oligonucleotide was observed after incubation with 20 units of restriction endonuclease for 3 hours.

Reagents Supplied with Enzyme:
10 x SE-Buffer W, 10 x SE-Buffer ROSE

Blocked by overlapping Dcm-methylation (CmCWGG):
GGTACCWGG.

**Turbo DNA Digestion:**
Applications:
-Fast DNA analysis
-Fast preparation of vectors for cloning
-Double digestion
Enzyme Properties:
1 µl of Turbo Acc65I cuts 1 µg of DNA in 1 x SE-Buffer W or universal 1 x SE-Buffer ROSE in 10 min (see the protocol below). Short time DNA digestion requires high quality purification of DNA sample. This enzyme can digest DNA at standard incubation time (1-16 hours) as well.

Turbo reaction protocol:
20 µl of the reaction volume:
Reaction Buffer (x10) - 2 µl
Plasmid DNA - 1-2 µl (up to 1 µg) or
PCR product - 5-10 µl (~0,2 µg)
Sterile water - up to 20 µl
+ 1 µl of Turbo Restriction Endonuclease
Incubate at 37°C for 10 min.