Restriction Endonuclease

SibEnzyme®

AsuHP I

Recognition Sequence: GGTGA(A)$_8$↓
CCACT(N)$_7$↑

S **E231**
200 units
5,000 u/ml

Lot:
Exp:
Store at -20°C

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

37°C | 65°C | O | λ | Dam

For more details scen the code

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CERTIFICATE OF ANALYSIS

Source: *Actinobacillus suis HP.*

Supplied in:
10 mM Tris-HCl (pH 7.5), 250 mM NaCl, 0.1 mM EDTA, 7 mM 2-mercaptoethanol, 200 µg/ml BSA, 50% glycerol.

Reaction Conditions:
1x SE-Buffer O. Incubate at37° C.

1X SE-Buffer O (pH 7.6 @ 25° C):
50 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 lambda DNA (dam-) in 1 hour at 37° C in a total reaction volume of 50 µl.

Quality Control Assays
Ligation:After 2-fold overdigestion with AsuHP I, ~30% 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 10 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 5 units of restriction endonuclease for 3 hours.

Enzyme Properties:
When using a buffer other than the optimal (Supplied) SE-Buffer, it may be necessary to add more enzymes to achieve complete digestion.

Blocked by overlapping dam-methylation (G^{m}ATC):
GGTGATC

AsuHP I may cleave N_9/N_8 depending on the sequence between the recognition and cleave sites.

Reagents Supplied with Enzyme:
10X SE Buffer O.