Asu II (isoschizomer)

5’… TT ▼ CGAA … 3’
3’ … AAGC ▲ TT … 5’

Asu II is a restriction enzyme purified from an isolated strain (#94S).

Catalogue No
102-1, 3000 U
102-2, 3x3000 U

Concentration
10-12u/μl and 40-60u/μl*

*Add an H to cat.# to order the high concentration

Reagents supplied: 10x U_{AsuII} and 10x K buffer

Unit substrate: Lambda DNA (Hind III digest).

Unit calculation assay conditions: 50 mM NaCl, 10 mM Tris-HCl (pH 7.9 @ 25°C), 10 mM MgCl₂, 1 mM dithiothreitol, 0.1% Triton X-100, 100 μg/ml BSA. Incubate at 37°C.

Absence of contaminants: 100 units of AsuII do not produce any unspecific cleavage products after 16 hrs incubation with 1 μg of λ DNA/Hind III digest at 37°C. After 50-fold overdigestion with AsuII, greater than 95% of the DNA fragments can be ligated and recut with this enzyme.

Storage buffer: 100 mM KCl, 10 mM Tris-HCl (pH 7.9@ 25°C), 0.1 mM EDTA, 1 mM dithiothreitol, 0.15% Triton X-100, 200 μg /ml BSA and 50% glycerol. Store at -20°C.

Heat inactivation: 65°C for 20 minutes.

Methylation Sensitivity:
dam methylation: Not sensitive
dcm methylation: Not sensitive
CpG methylation: Blocked

Percent Activity in MINOTECH Buffers

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<th></th>
<th>L</th>
<th>M</th>
<th>H</th>
<th>SH</th>
<th>A</th>
<th>K</th>
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General reaction mixture:

10U AsuII
10x U_{AsuII} or K buffer * 2μl
DNA substrate <1μg
Sterile ultrapure water Up to 20 μl

Incubate for 15 min at 37°C

*In the case of U_{AsuII} buffer we recommend the addition of BSA to a final concentration of 100 μg/ml.

Frequency of Cutting

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<th></th>
<th>λ</th>
<th>Ad-2</th>
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<th>pUC18</th>
<th>M13mp18</th>
<th>pBR322</th>
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Lambda DNA 0.7 % agarose