Lambda DNA Bgll digest, 0.7 % agarose

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5'...GCCNNNN™NGGC...3' 3'...CGGN₄NNNNCCG...5'

Content:

Ref No.	250105S	color
BgII 10 U/μL	2000 units	blue
10x buffer U _{Bgll} *	1x 1 mL	red
10x buffer K	1x 1 mL	yellow
Datasheet		

We recommend the use of buffer K as universal buffer (BSA included).

Storage: -20 °C

Concentration: 10 U/µL

Source: BgII is a restriction enzyme purified from *Bacillus globigii* lacking BgIII.

Enzyme Properties:

1x buffer U_{Bgll} composition: 20 mM Tris-HCl (pH 8.5 at 25 °C), 100 mM KCl, 10 mM MgCl₂, 0.04 %

Triton X-100.

 $\textbf{General reaction mixture:} \qquad 10 \text{ U BcII} \qquad \qquad 1 \text{ } \mu \text{L}$

10x buffer U_{Bgll}^* or K 2 μL DNA substrate <1 μg Sterile ultrapure water Up to 20 μL

Incubate for 15 min at 37 °C

Heat inactivation: 65 °C for 20 minutes.

Methylation Sensitivity: dam methylation: Not sensitive

dcm methylation: Not sensitive

CpG methylation: Blocked by some combinations of overlapping

Storage buffer: 20 mM Tris-HCl (pH 7.5 at 25 °C), 300 mM NaCl, 0.1 mM EDTA,

1 mM Dithiothreitol, 500 μ g/ml BSA and 50 % glycerol. Store at -20 °C.

Absence of contaminants: 100 units of Bgll do not produce any unspecific cleavage products after 16 hrs

incubation with 1 μg of Lambda DNA at 37 °C. After 50-fold overdigestion with BgII, greater than 95 % of the DNA fragments can be ligated and recut with

this enzyme.

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Unit definition:One unit is defined as the amount of enzyme required to produce a complete

digest of 1 μg Lambda DNA (dam⁻) in 60 minutes in a total reaction volume of

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0.05 mL under assay conditions.

λ Ad-2 Φx174 pUC18 M13mp18 pBR322
Frequency of Cutting:

20

Percent Activity in BIORON Buffers:

L* M* H* SH* A* K

10-25 75-100 75-100 75-100 50 100

*we recommend the addition of BSA to a final concentration of 100 µg/mL.

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