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TECHNICAL INFORMATION

Catalog Number: 150464

Bgl II

5' . . . A/GATCT . . . 3'

CAS # : 81295-12-7

Source: *Bacillus globigii*

Unit Definition: One unit is the amount of enzyme required to completely digest 1 mg of λ DNA in 1 hr in a total reaction volume of 50 ml.

Assay Conditions: 50 mM Tris-HCl (pH 7.5 at 37°C)

10 mM MgCl₂
100 mM NaCl
1 mM dithiothreitol
100 μ g/ml bovine serum albumin
1 μ g lambda DNA

Storage Buffer: 50 mM Tris-HCl (pH 7.4 at 4°C)

150 mM KCl
1 mM EDTA
500 μ g/ml bovine serum albumin
50% (v/v) glycerol.

Non-specific Endonuclease: Incubation of 15 units of Bgl II with 1 mg of λ DNA at 37°C of 16 hr (a 240-fold over-digestion) resulted in the same sharp characteristic banding pattern as the standard assay reaction, as determined by agarose gel electrophoresis.

3'-Exonuclease: 5, 10 and 20 unit of Bgl II and 0.13 mg of 3'-ends of λ /Taq I fragments (3'-labeled with T4 DNA Polymerase and [³H]dGTP and [³H]dCTP, incubated for 1 hr at 37°C resulted in 0.04-slope of %-end label released per unit of enzyme. Reaction volume 10 ml.

5'-Exonuclease/5'-Phosphatase: Incubation of 5, 10 and 20 units of Bgl II with 0.05 mg of 5'-ends of [5'-³²P] λ /Hae III fragments for 1 hr at 37°C resulted in 0.02-slope of %-end label released per unit of enzyme. Reaction volume 10 ml.

Reference:

– Pirota, V., "Recognition sequence from", *Nucleic Acids Res.*, **3**, 1747-1760 (1976)