

Store at -20°C

Msc I

(Bal I)

Code No. **MSC-1****

Lot No. *********

Size : 40 units(MSC-101)

Source : *Micrococcus species*

Concentration : ****** units/μl

Unit Definition : One unit is defined as the amount of enzyme required to completely digest 1 μg of λ-DNA in 1 hr at 37°C in 50 μl of assay buffer.

Storage Buffer : 10 mM Tris-HCl(pH7.4)
150 mM KCl
1 mM Dithiothreitol
0.1 mM EDTA
200 μg/ml Bovine serum albumin
50 % (V/V) Glycerol

Assay Buffer : 20 mM Tris-acetate(pH7.9)
10 mM Magnesium acetate
50 mM Potassium acetate
1 mM Dithiothreitol

Reaction Buffer (Attached) : ① TA Buffer (x10 Concentration)
330 mM Tris-Acetate(pH7.9)
660 mM KOAc
100 mM MgOAc₂
5 mM Dithiothreitol
② BSA (x10 Concentration)
1 mg/ml Bovine serum albumin

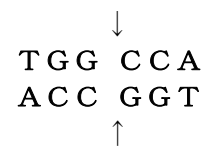
Overdigestion : When 13 units of enzyme was incubated with 1 μg of λ-DNA for 16 hrs at 37°C in 50 μl of assay buffer, a normal and sharp pattern was shown on an agarose gel electrophoresis.

Ligation and Recutting : After digestion of λ-DNA by 4 units of enzyme for 2 hrs at 37°C, 95 % of the fragment was ligated with T4 DNA Ligase. 95 % of the ligated DNA could be recut under the standard conditions.

Note : ① Enzyme quantity cutting each DNA[1μg]

λ-DNA	pBR322	pUC19	M13mp18	(U)
1	1~3	1	3	

Recognition Sequence



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Lot No. *********

包装 : 40 units(MSC-101)

起源 : *Micrococcus species*

濃度 : ****** units/μl

活性の定義 : 下記反応液組成において、反応液量 50 μl, 37°C, 60 分間に基質 λ-DNA 1 μg を完全に分解するために必要な酵素量を 1 単位とする。

形状 : 10 mM Tris-HCl(pH7.4)
150 mM KCl
1 mM Dithiothreitol
0.1 mM EDTA
200 μg/ml Bovine serum albumin
50 % (V/V) Glycerol

反応液組成 : 20 mM Tris-acetate(pH7.9)
10 mM Magnesium acetate
50 mM Potassium acetate
1 mM Dithiothreitol

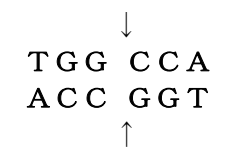
添付バッファー : ① TA バッファー (10 倍濃度)
330 mM Tris-Acetate(pH7.9)
660 mM KOAc
100 mM MgOAc₂
5 mM Dithiothreitol
② BSA (10 倍濃度)
1 mg/ml Bovine serum albumin

過剰テスト : 13units の本酵素を上記反応条件にて 16 時間反応させても DNA フラグメントの電気泳動パターンに変化は認められない。

Ligation /Recutting 効率: 8 倍の酵素で切断した λ-DNA フラグメントの 95%が T4 DNA Ligase で Ligation し、そのうち 95%が本酵素で切断される。
Ⓜ

特記事項 : ① メチル化の影響: **T G G C C A**は切断されません。
② 以下の DNA 1μg の完全分解に必要な酵素量(Unit)

認識配列



λ-DNA	pBR322	pUC19	M13mp18
1	1~3	1	3