

**Ple I**

| Cat. No. | 용량          | 농도          |
|----------|-------------|-------------|
| DYR1790  | 1,000 units | 5 units/μl  |
| DYR1792  | 2,000 units | 5 units/μl  |
| DYR1794  | 5,000 units | 5 units/μl  |
| DYR1796  | 5,000 units | 25 units/μl |

**◆ 제품구성**

- Ple I
- 10X DY Buffer IV
- 10X FastCut Buffer
- Sterile water
- Dyne 6X DNA Loading Buffer ver.2

**◆ Source**

- Pseudomonas lemoignei*

**◆ Quality control**

- Unit definition assay
- Overdigestion assay
- Endonuclease assay
- Extreme purity assay

**◆ 인식부위**



| Single letter code    |                          |
|-----------------------|--------------------------|
| W = A or T            | S = C or V = A or C or G |
| N = A or C or G or TG | M = A or C               |
| K = G or T            | R = A or G               |
| Y = C or T            | B = C or G or T          |
| D = A or G or T       | H = A or C or T          |

**◆ 보관온도**

- 20°C

**◆ Heat inactivation**

- 65°C, 20분.

**◆ Unit정의**

- 1 unit은 박테리오파지 λ DNA 1 μg을 50 μl 반응물로 37°C에서 1시간 동안 완전히 분해하는데 필요한 효소의 양이다.

**◆ Buffer별 상대적 활성도**

| I   | II  | III | IV   | FastCut |
|-----|-----|-----|------|---------|
| 75% | 75% | 50% | 100% | 100%    |

**◆ Methylation effect**

| Methylation | dam      | dcm      | CpG         |
|-------------|----------|----------|-------------|
| Cleavage    | Cleavage | Cleavage | Conditional |

**◆ 주의사항**

- Mly I의 동일서열인식 제한효소이다.
- CpG 메틸화(methylation)은 mammalian genomic DNA 절단을 저해한다.

**◆ 표준반응 조건**

- Normal Protocol

| Component        | 농도   | Volume              |
|------------------|------|---------------------|
| Substrate DNA    | 1 μg | X μl                |
| 10X DY Buffer IV | 1 X  | 5 μl                |
| Ple I            |      | Substrate dependent |
| Sterile water    |      | Up to 50 μl         |

\* Incubate at 37°C for 1 hr

- Fast Protocol

| Component          | 농도     | Volume      |
|--------------------|--------|-------------|
| Substrate DNA      | 1 μg   | X μl        |
| 10X FastCut Buffer | 1 X    | 5 μl        |
| Ple I              | 5 unit | 1 μl        |
| Sterile water      |        | Up to 50 μl |

\* Incubate at 37°C for 15 min