

Dyne SmartCut Sac I

| Cat. No. | 용량 | 농도 |
|----------|--------------|--------------|
| DYR2210 | 2,000 units | 20 units/μl |
| DYR2212 | 4,000 units | 20 units/μl |
| DYR2214 | 10,000 units | 20 units/μl |
| DYR2216 | 10,000 units | 100 units/μl |

◆ **제품구성**

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

◆ **Source**

- *Streptomyces achromogenes*

◆ **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 for 20 min

◆ **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% | 50% | 10% | 100% | 100% |

◆ **Methylation effect**

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

◆ **주의사항**

- CpG 메틸화(methylation)은 mammalian genomic DNA의 절단을 저해한다.

◆ **표준반응 조건**

- Normal Protocol

| Component | 농도 | Volume |
|---------------------|------|---------------------|
| Substrate DNA | 1 μg | X μl |
| 10X DY Buffer IV | 1 X | 5 μl |
| Dyne SmartCut Sac 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 |
| Dyne SmartCut Sac I | 20 unit | 1 μl |
| Sterile water | | Up to 50 μl |

- * Incubate at 37°C for 15 min