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PvuII

Catalog #PVU-PE101

Product Component	Sizes
PvuII (20U/μL)	400U, 2000 U, 20 kU
10X Cut Reaction Buffer	160μL, 800μL, 8mL

Storage/Transportation Condition Store at -20°C ± 5°C for up to 24 months. Avoid repeated freeze/thaw cycles. Transport on dry ice.
Form Liquid
Source *E. coli* strain that carries the PvuII gene from *Proteus hauseri*
Storage Buffer 10 mM Tris-HCl, 200 mM NaCl, 1 mM DTT, 0.1 mM EDTA, 200 μg/mL Recombinant Albumin, 50% Glycerol, pH 7.4
10X Cut Reaction Buffer 200 mM Tris-acetate, 500 mM Potassium Acetate, 100 mM Magnesium Acetate, 1 mg/ml Recombinant Albumin, pH 7.9
Concentration 20 U/μL
Unit Definition One unit is defined as the amount of enzyme required to digest 1 μg of λDNA within 1 hour at 37°C in a total reaction volume of 50 μL.

Restriction Site
5' …CAG↓CTG… 3'
3' …GTC↑GAC… 5'

Product Description
The restriction site of PvuII is CAG/CTG, which forms a blunt end after digestion. 10X Cut Reaction Buffer is a reaction buffer containing recombinant albumin (rAlbumin), which ensures the safety and stability of the product.

Quality Statement
This product is GMP-Ready, indicating that it is currently manufactured at industrial-grade and can be moved to GMP-Grade manufacturing standards as necessary.

Applications
- Molecular cloning
- Restriction site mapping,
- Genotyping
- SNP

Recommended Protocol for Digestion

1. Make the reaction mixture according to the table below:

Reagent	Quantity
DNA	1 μg
10X Cut Reaction Buffer	5 μL
PvuII (20U/μL)	1 μL*
Nuclease-free H_2O	Up to 50 μL

* Add PvuII last. It is recommended that the volume of PvuII should not exceed 10% of the reaction volume as high glycerol concentration (>5% v/v) may cause star activity.

2. Incubate at 37°C for 15 to 30 minutes.
3. Incubate at 75°C for 10 minutes to stop the reaction.

Notes
1. PvuII is not sensitive to Dam, Dcm, and CpG methylation.
2. The preparation of DNA to be cleaved should be free of contaminants such as phenol, chloroform, alcohol, EDTA or detergents, all of which can interfere with restriction enzyme activity.
3. For research use only.