# PvuII

**5'…CAG▼CTG…3'**
**3'…GTC▲GAC…5'**

| Content: | Ref No. | 250128S | color |
|---|---|---|---|
| | PvuII 10 U/µL | 4500 units | blue |
| | 10x buffer M* | 1x 1 mL | red |
| | 10x buffer K | 1x 1 mL | yellow |
| | Datasheet | | |

Lambda DNA PvuII digest, 1 % agarose

**We recommend the use of buffer K as universal buffer (BSA included).**
**Star activity:** Conditions of low ionic strength, high enzyme concentration, glycerol concentration >5 % or pH >8.0 may result in star activity.

**Storage:** -20 °C

**Concentration:** 10 U/µL

**Source:** PvuII is a restriction enzyme purified from a recombinant *E.coli* strain.

## Enzyme Properties:

**1x buffer M composition:** 10 mM Tris-HCl (pH 7.9 at 25 °C), 50 mM NaCl, 10 mM $MgCl_2$, 1 mM Dithiothreitol.

**General reaction mixture:**

| | |
|---|---|
| 10 U PvuII | 1 µL |
| 10x buffer M* or K | 2 µL |
| DNA substrate | <1 µg |
| Sterile ultrapure water | Up to 20 µL |

**Incubate for 15 min at 37 °C**

**Heat inactivation:** No.

**Methylation Sensitivity:**
*dam* methylation: Not sensitive
*dcm* methylation: Not sensitive
CpG methylation: Not sensitive

**Storage buffer:** 10 mM Tris-HCl (pH 7.4), 50 mM KCl, 0.1 mM EDTA, 1 mM Dithiothreitol, 200 µg/ml BSA and 50 % glycerol. Store at -20 °C.

**Absence of contaminants:** 100 units of PvuII do not produce any unspecific cleavage products after 16 hrs incubation with 1 µg of Lambda DNA at 37 °C. After 10-fold overdigestion with PvuII greater than 95 % of the DNA fragments can be ligated and recut with this enzyme.

**Unit definition:** One unit is defined as the amount of enzyme required to produce a complete digest of 1 µg Lambda DNA in 60 minutes in a total reaction volume of 0.05 mL under assay conditions.

**Frequency of Cutting:**

| λ | Ad-2 | Φx174 | pUC18 | M13mp18 | pBR322 |
|---|---|---|---|---|---|
| 15 | 24 | 0 | 2 | 3 | 1 |

**Percent Activity in BIORON Buffers:**

| L* | M* | H* | SH* | A* | K |
|---|---|---|---|---|---|
| 25-50 | **100** | 100 | 25-50 | 50 | **100** |

*we recommend the addition of BSA to a final concentration of 100 µg/mL.

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