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TECHNICAL REFERENCE

# *Ability of Restriction Enzymes to Cut PCR Products That Have Restriction Sites Near the End of the Fragment*

**Ability of Restriction Enzymes to Cut PCR Products That Have Restriction Sites Near the End of the Fragment.**

| | Distance (in bp) from the End of the PCR Fragment | | | |
|---|---|---|---|---|
| **Enzyme** | **0** | **1** | **2** | **3** |
| ApaI | – | – | ± | + |
| BamHI | – | ± | + | + |
| BstXI | – | ± | + | + |
| ClaI | – | ± | + | + |
| EcoRI | – | ± | + | + |
| EcoRV | – | + | + | + |
| HindIII | – | – | + | + |
| NotI | – | – | + | + |
| PstI | – | – | ± | + |
| SacI | – | ± | + | + |
| SalI | + | + | + | + |
| SmaI | – | ± | + | + |
| SpeI | + | + | + | + |
| XbaI | – | ± | + | + |
| XhoI | – | – | ± | + |

PCR products in which the end of the restriction enzyme recognition sequence was flush with the end of the product 0, 1, 2 or 3 base pairs away from the end of the product were tested with a variety of enzymes (1). Purified PCR fragments (10–50ng) were digested with 0.5 units of restriction enzyme in 10µl of the appropriate reaction buffer for 45 minutes. Digestion is indicated as follows: cleavable (+), not cleavable (–) and not reproducible (±). Data are the result of at least duplicate experiments and are reproduced here by permission of Eaton Publishing.

## Reference

1. Zimmermann, K. *et al.* (1998) Digestion of terminal restriction endonuclease recognition sites on PCR products. *BioTechniques* **24**, 582.

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