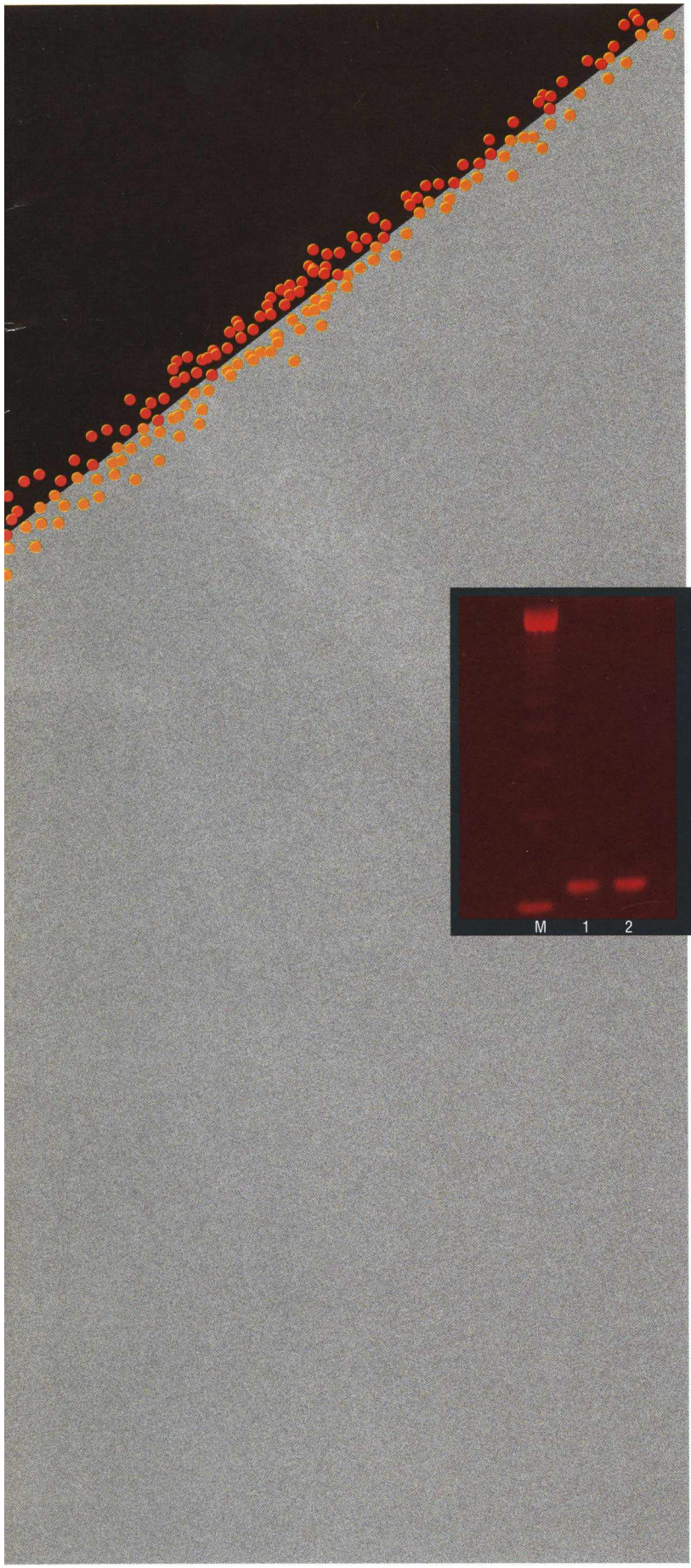

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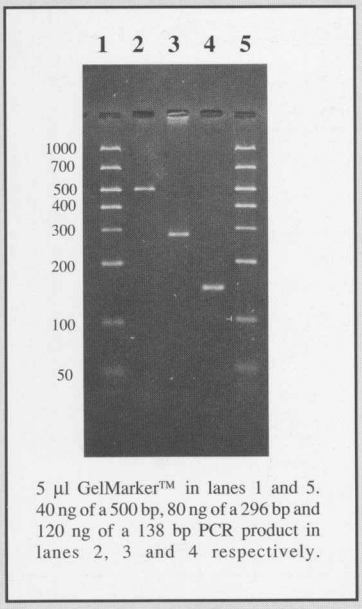

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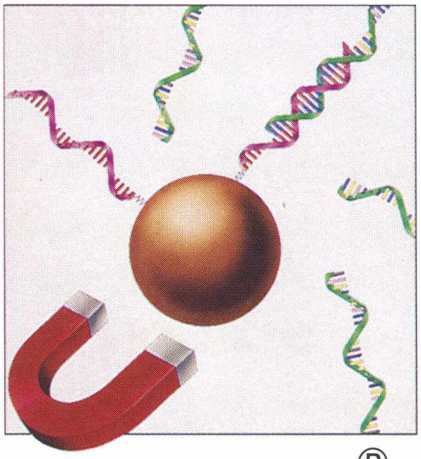

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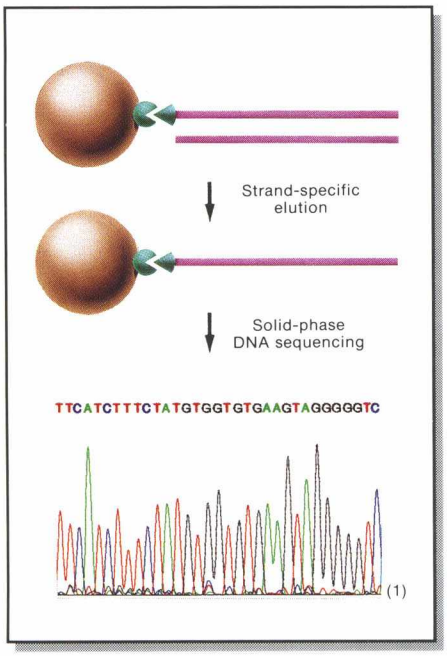

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References: 1. Sequencing by Dr. G. Fry, Applied Biosystems, Inc.
2. Hultman *et al.* BioTechniques 1991;10(1):84-93

* The PCR process is the subject of patents and patent applications of Cetus Corporation.
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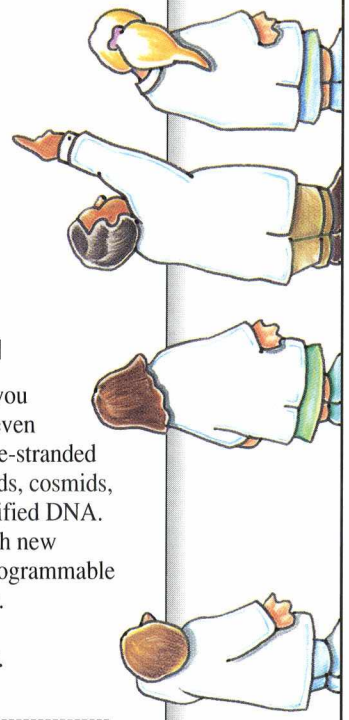

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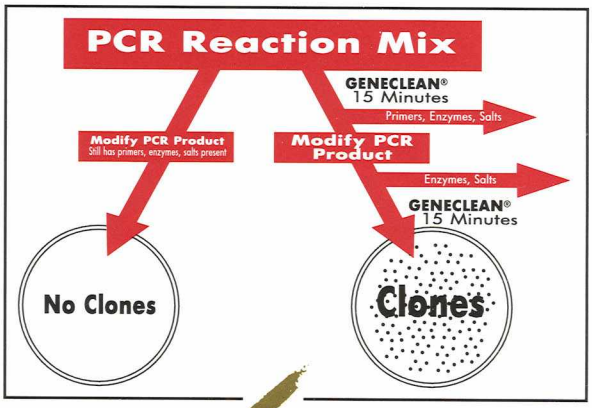

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1. Clark, J.M. (1988) Nucleic Acids Res. 16, 9677.
2. Hemsley, A., et al. (1989) Nucleic Acids Res. 17, 6545
3. Aslanidis, C. and de Jong, P. J. (1990) Nucleic Acids Res. 18, 6069
4. Starr, L. and Quaranta, V. (1991) In preparation

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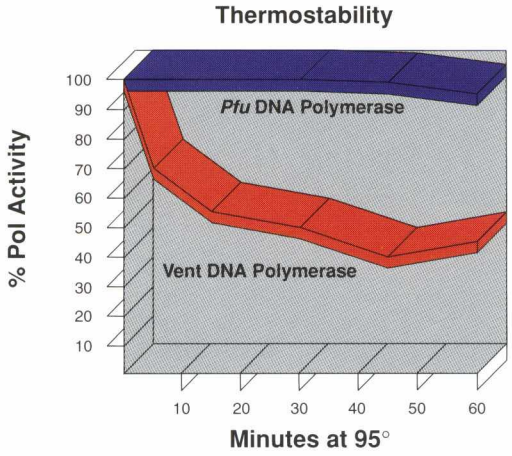

Figure 1: Thermostability of *Pfu* and Vent DNA Polymerases at 95°C.
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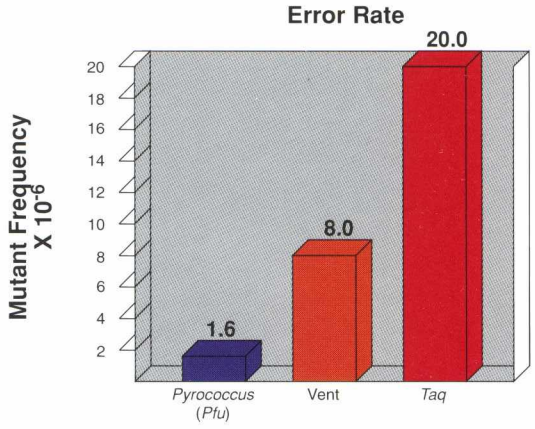

Figure 2: Polymerase fidelity was measured by modification of an assay described by Kohler *et al* (1991) *Pro. Natl. Acad. Sci. USA*, in press. Error rates reflect mutations per nucleotide incurred in the *lacI* gene during DNA synthesis. Vent is derived from *Thermococcus litoralis* and was obtained from New England Biolabs. *Pfu* is derived from *Pyrococcus furiosus* and is sold by Stratagene. *Taq* polymerase is derived from *Thermus aquaticus* and was obtained from Cetus Perkin Elmer.

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1. Bryant, F.O. and Adams, M.W.W. (1989) *J. Biol. Chem.* 264:5070-5079.
2. Fiala, G. and Stetter, K.O. (1986) *Arch Microbiol.* 145:56-61.
3. Eckert, K.A. and Kunkle, T.A. (1990) *Nucleic Acids Res.* 18:3739-3744.
4. Chien, A., Edgar, D.B. and Trela, J.M. (1976) *J. Bac.* 127:1550-1557.

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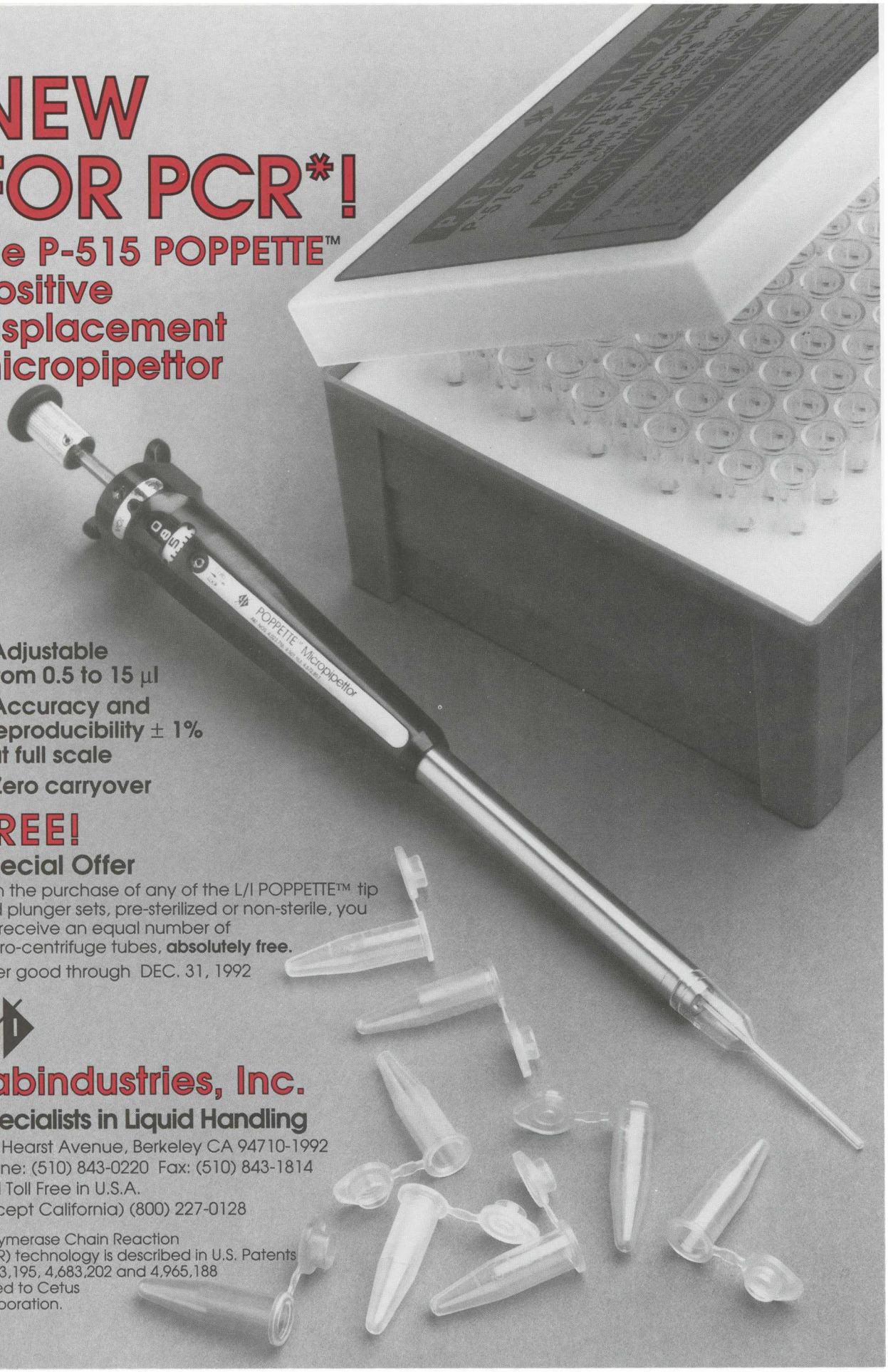

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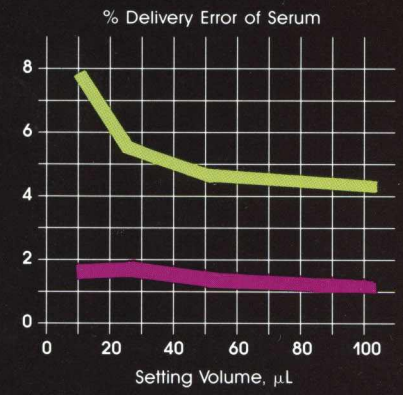

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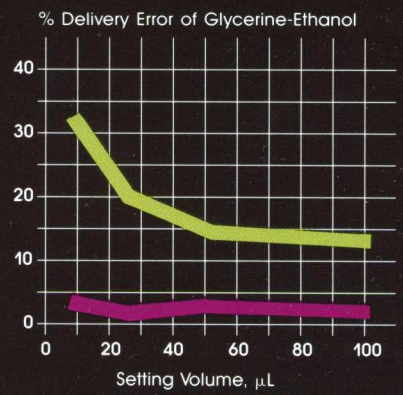

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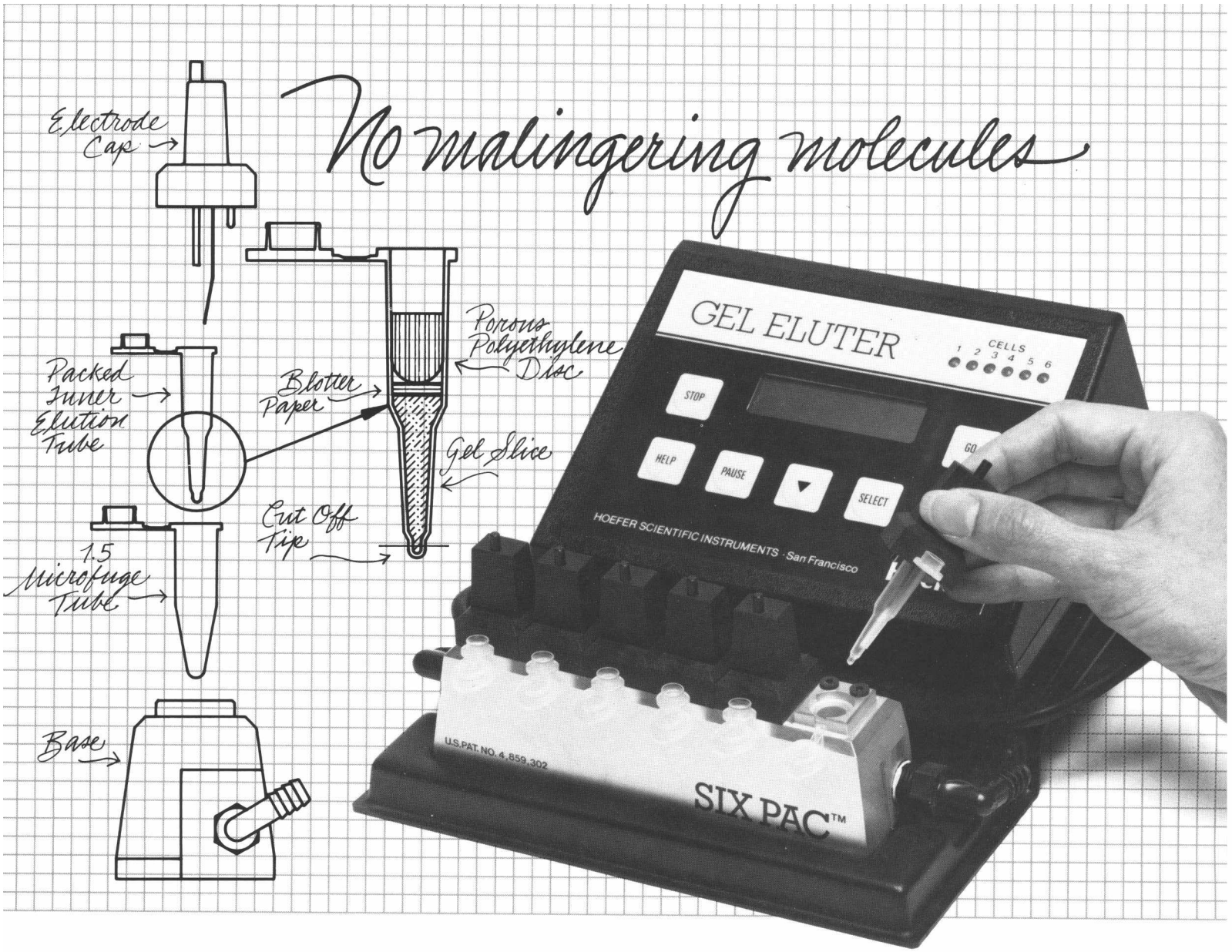

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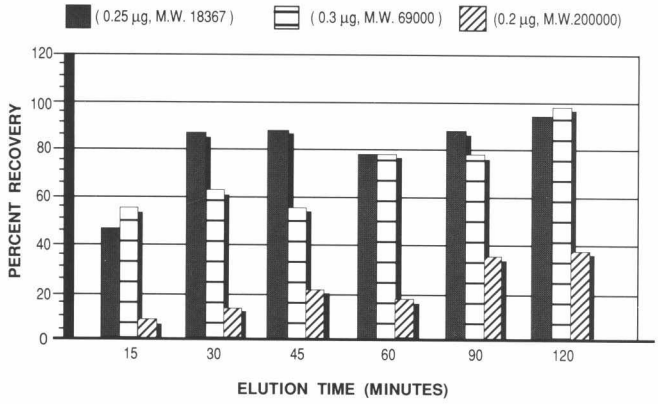

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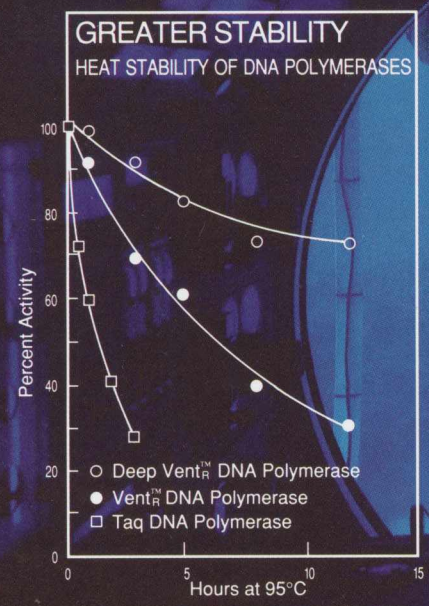
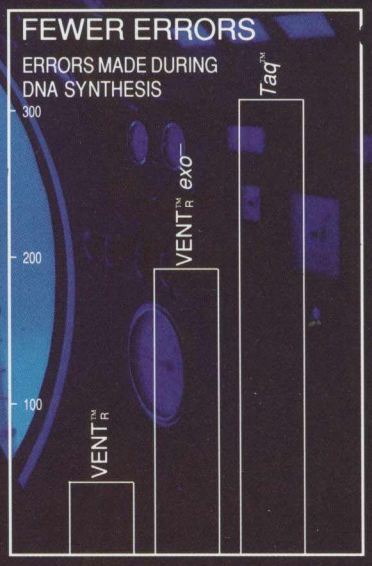


Heat stability of various thermal stable DNA polymerases. All were incubated at 95°C under standard assay conditions.



Reversion frequency reflects error rate in DNA synthesis and was measured by the opal codon reversion assay. Kunkel et al. (1987) Proc. Natl. Acad. Sci. USA 84, 4865-4869. Mattila P. et al. (1991) Nucleic Acids Res.19, 4967-4973.

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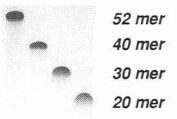

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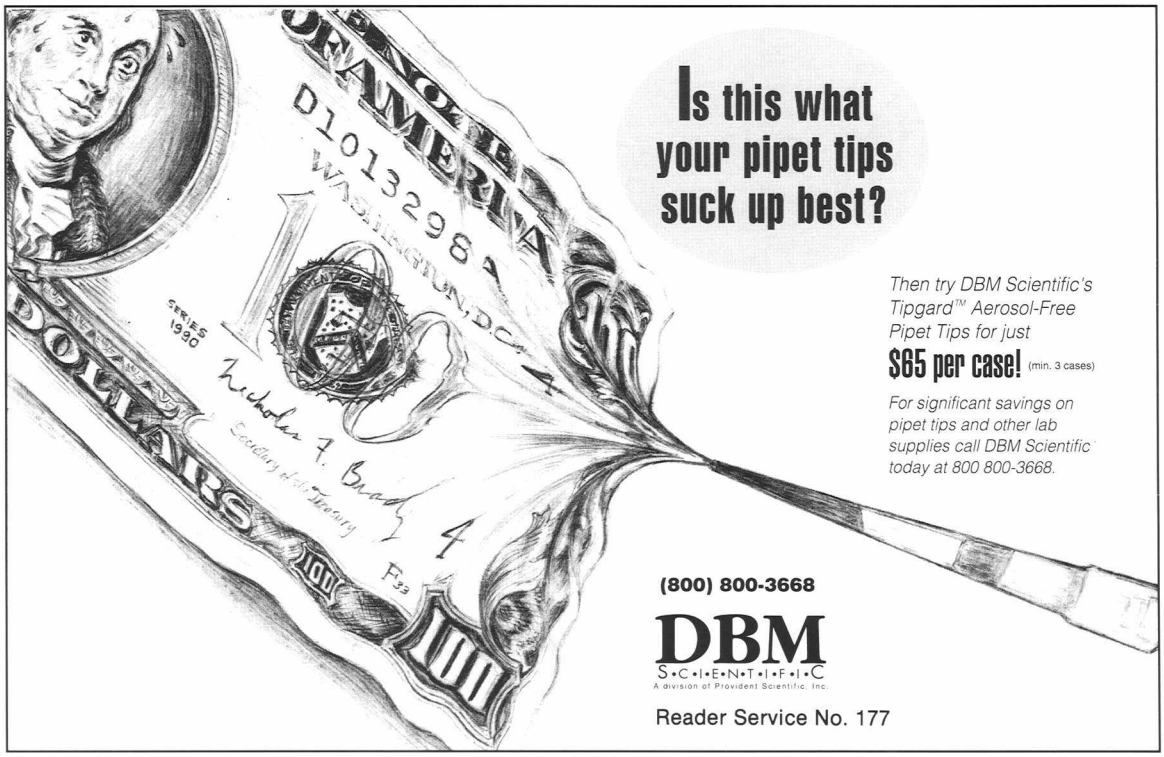

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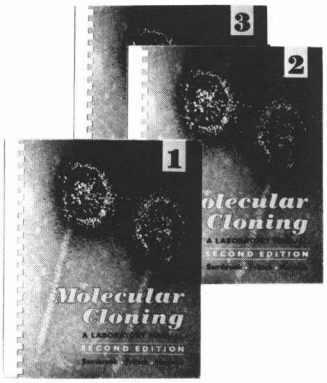

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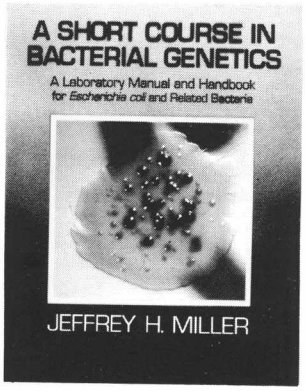

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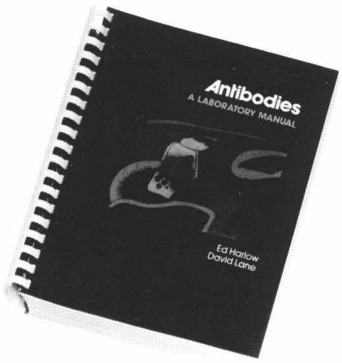

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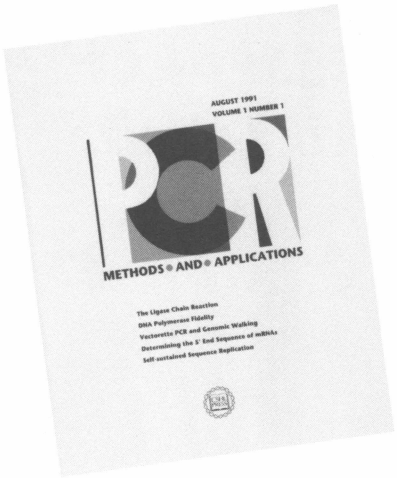

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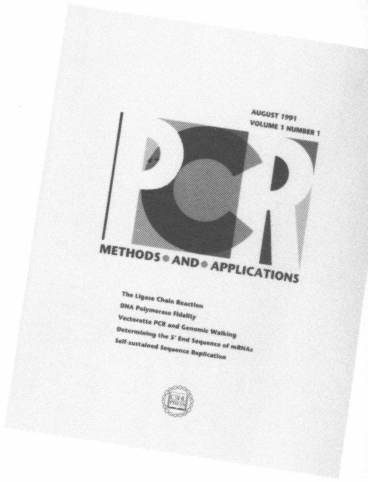

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