



New England Biolabs, Inc.  
Tel: 800-632-5227 (orders)  
Tel: 800-632-7799 (support)  
Fax: 978-921-1350  
e-mail: [info@neb.com](mailto:info@neb.com)  
WWW: <http://www.neb.com>

## Biotin & Fluorescein Labeled Primers

Recent technological advances have made the use of non-radioactive detection systems an alternative to radioactive detection systems. Biotin & fluorescein labeled primers and probes have proved useful in systems using colorimetric detection of target nucleic acid sequences on nitrocellulose filters<sup>1</sup> and *in situ* detection of target DNAs<sup>2</sup>. They have been used in DNA quantitation, sequencing<sup>3,4</sup> and sequencing systems with ultrasensitive enzyme labels<sup>5,6</sup>.

As a part of our continued commitment to providing the most advanced tools for molecular biology, all of New England Biolabs' primers and probes are also available in 5' biotin-labeled form, including:

Lambda gt11 Primers  
Lambda gt10 Primers  
M13/pUC Primers  
pBR322 Primers  
Transcription Promoter Primers (SP6, T7, T3)

The following primers are also available as 5'-5(6) carboxyfluorescein labeled sequences. Suitable for automated dideoxy sequencing and mapping.

- Lambda gt11 Primers S1218S, S1222S.
- M13/pUC Primers S1224S, S1201S, S1211S, S1233S.
- Transcription Promoter Primers S1227S, S1228S, S1226S, S1248S, S1249S, and MalE Primer S1237S.

### References

1. Leary, J.J., Brigati, D.J. and Ward, D.C. (1983) *Proc. Natl. Acad. Sci.* 80, 4045-4049.
2. Langer-Safer, P.R., Levine, J. and Ward, D.C. (1983) *Proc. Natl. Acad. Sci.* 79, 4381-4385.
3. Landgraf, A., Reckmann, B., and Pingoud, A. *Anal. Biochem.* 193, 231-235.
4. Ansoerge, W. et al. (1990) *Nucleic Acids Research* 18, 1067.
5. Church, G. M. and Kieffer-Higgins, S., *Science* (1988) *Science* 40, 185-188.
6. Bronstein, I., Voyta, J.C., Lazzari, K.G., *Biotechniques*, Vol. 8 No. 3 (1990).