





1-800-632-7799 info@neb.com www.neb.com

## N3021S

30 μg Lot: 1771401 Exp: 1/16

1,000 µg/ml Store at -20°C

**Description:** This is the double-stranded, covalently closed, circular form of  $\phi$ X174 RF I DNA (supercoiled). The molecular weight of  $\phi$ X174 RF I is 3.50 x 10 $^6$  daltons and it is 5,386 base pairs in length. Greater than 90% of the molecules are RF I, and the remainder are RF II, as determined by agarose gel electrophoresis.

Supplied in: 10 mM Tris-HCl (pH 8.0) and 1 mM EDTA.

**Preparation:** The  $\phi$ X174 RF I DNA is isolated from *E. coli* HF 4704 infected with  $\phi$ X174 *am*3 *cs*70 by a modification of the method of Godson and Vapnek (nucleotide sequenced by F. Sanger).

#### References:

- 1. Sanger, F. et al. J. Mol. Biol., 125, 225.
- Godson, G. N. and Vapnek, D. (1973) *Biochem. Biophys. Acta.* 299, 516.

CERTIFICATE OF ANALYSIS

# **φΧ174 RF I DNA**



1-800-632-7799 info@neb.com www.neb.com



## N3021S

30 μg Lot: 1771401 Exp: 1/16

1,000  $\mu$ g/ml Store at -20°C

**Description:** This is the double-stranded, covalently closed, circular form of  $\phi$ X174 RF I DNA (supercoiled). The molecular weight of  $\phi$ X174 RF I is 3.50 x 106 daltons and it is 5,386 base pairs in length. Greater than 90% of the molecules are RF I, and the remainder are RF II, as determined by agarose gel electrophoresis.

Supplied in: 10 mM Tris-HCI (pH 8.0) and 1 mM EDTA.

**Preparation:** The  $\phi$ X174 RF I DNA is isolated from *E. coli* HF 4704 infected with  $\phi$ X174 *am*3 *cs*70 by a modification of the method of Godson and Vapnek (nucleotide sequenced by F. Sanger).

### References:

- 1. Sanger, F. et al. J. Mol. Biol., 125, 225.
- 2. Godson, G. N. and Vapnek, D. (1973) *Biochem. Biophys. Acta.* 299, 516.

CERTIFICATE OF ANALYSIS