

**ProtoScript II  
Reverse Transcriptase  
Reaction Buffer**



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



B0368S 003130516051

**B0368S**

**6.0 ml (5X) Lot: 0031305**  
**100 mM DTT (10X) Store at -20°C Exp: 5/16**

**Description:** New England Biolabs supplies a 5X reaction buffer and 10X DTT with ProtoScript II Reverse Transcriptase. At a 1X concentration, this reaction buffer combination assures optimal activity of the enzyme.

**1X ProtoScript II Reverse Transcriptase**

**Reaction Buffer:**

50 mM Tris-HCl  
75 mM KCl  
3 mM MgCl<sub>2</sub>  
pH 8.3 @ 25°C

**Reagents Supplied with Buffer:**

ProtoScript II Reverse Transcriptase  
Reaction Buffer (5X)  
100 mM DTT (10X)

**Quality Control Assays**

**16-Hour Incubation:** 1 µg of HaeIII digested φX174 RF I DNA in 50 µl of this reaction buffer at 1X concentration showed no detectable non-specific nuclease degradation after incubation at 37°C for 16 hours.

**Endonuclease Activity:** Incubation of this reaction buffer at a 1X concentration with 1 µg φX174 RF I DNA for 4 hours at 37°C in a 50 µl reaction resulted in less than 5% conversion to RF II.

**RNase Activity:** Incubation of 40 ng of RNA transcripts in 50 µl of this reaction buffer at a 1X concentration for 2 hours at 37°C resulted in no detectable degradation of the RNA as determined by gel electrophoresis.



CERTIFICATE OF ANALYSIS

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