ProtoScript II
Reverse Transcriptase
Reaction Buffer

B0368S
6.0 ml (5X) Lot: 0021204
100 mM DTT (10X) Store at –20°C Exp: 4/13

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 MgCl₂
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 HaellI 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.