**RNase H Reaction Buffer**

6.0 ml RNase H Reaction Buffer (10X)
Store at –20°C Lot: 0081311 Exp: 11/16

**Description:** New England Biolabs supplies a 10X reaction buffer with all of its enzymes. At a 1X concentration this reaction buffer assures optimal activity of the enzyme.

1X RNase H Reaction Buffer:
75 mM KCl
50 mM Tris-HCl
3 mM MgCl₂
10 mM dithiothreitol
pH 8.3 @ 25°C

**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.