1X NEBuffer 1.1:
10 mM Bis Tris Propane-HCl
10 mM MgCl₂
100 µg/ml BSA
pH 7.0 @ 25°C
Supplied as a 10X concentrated stock

Quality Control
pH range: The pH of 10X NEBuffer 1.1 is between pH 6.9 and 7.1.

16-hour Non-specific Nuclease Activity Assay:
A 50 µl reaction in 1X NEBuffer 1.1 containing 1 µg of φX HaeIII digested DNA incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.

Endonuclease (nicking) Activity Assay: A 50 µl reaction in 1X NEBuffer 1.1 containing 1 µg of supercoiled φX174 DNA incubated for 4 hours at 37°C results in < 10% conversion to the nicked form as determined by agarose gel electrophoresis.

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10 mM Bis Tris Propane-HCl
10 mM MgCl₂
100 µg/ml BSA
pH 7.0 @ 25°C
Supplied as a 10X concentrated stock

Quality Control
pH range: The pH of 10X NEBuffer 1.1 is between pH 6.9 and 7.1.

16-hour Non-specific Nuclease Activity Assay:
A 50 µl reaction in 1X NEBuffer 1.1 containing 1 µg of φX HaeIII digested DNA incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.

Endonuclease (nicking) Activity Assay: A 50 µl reaction in 1X NEBuffer 1.1 containing 1 µg of supercoiled φX174 DNA incubated for 4 hours at 37°C results in < 10% conversion to the nicked form as determined by agarose gel electrophoresis.

Buffer Functional Assay: A 50 µl reaction in 1X NEBuffer 1.1 containing 1 µg of λ HindIII DNA and 1 unit of Sacl, or 1 µg pXba DNA and 1 unit of Kpnl, incubated for 1 hour at 37°C results in complete digestion of the substrate DNA as determined by agarose gel electrophoresis.

RNase Activity (Extended Digestion): A 10 µl reaction in 1X NEBuffer 1.1 with 40 ng RNA transcript is incubated for 16 hours at 37°C. After incubation for 16 hours, no detectable degradation of the RNA is observed as determined by gel electrophoresis using fluorescent detection.

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