

PROTEINASE K ACTIVITY IN COMMONLY USED BUFFERS

Reaction conditions: 10 minutes incubation at 37°C, denaturated hemoglobin used as a substrate.

Buffer	Application Example	Activity (%)
20 mM Tris-HCl, pH 8.0	Reference	100
10 mM Tris-HCl, 1 mM EDTA, 0.5 % SDS, pH 8.0	Bacterial genomic DNA isolation	108
10 mM Tris-HCl, 100 mM NaCl, 25 mM EDTA, 1 % SDS, pH 8.0	Genomic DNA isolation from mammalian tissues	171
100 mM Tris-HCl, 100 mM EDTA, 250 mM NaCl, 1 % Sarkosyl, pH 8.0	Plant tissue genomic DNA isolation	118
10 mM Tris-HCl, 50 mM NaCl, 1 mM DTT, 5 mM EDTA, 0.5 % SDS, pH 7.9	Inactivation of Calf Intestinal Alkaline Phosphatase	104
50 mM Tris-HCl, 1 mM CaCl ₂ , 3 mM DTT, 2 M Urea, pH 8.0	Denaturation of proteins	66
10 mM Tris-HCl, 1.5 mM MgCl ₂ , 50 mM KCl, 0.1 % Triton X-100, pH 8.8	Optimized DyNAzyme™ Buffer	158
50 mM Tris-HCl, 1.5 mM MgCl ₂ , 15 mM (NH ₄) ₂ SO ₄ , 0.1 % Triton X-100, pH 9.0	Optimized DyNAzyme™ EXT Buffer	168