Formulas for QIAGEN® Kit Buffers

For long term storage, all buffers should be sterilized by filtration or autoclaving. Solutions that contain ethanol, isopropanol or MOPS should be sterilized by filtration only.

P1 (resuspension buffer): (QIAGEN® cat# 19051, 500ml) 50 mM Tris-HCl, 10 mM EDTA, pH 8.0 (25ºC), 50-100 µg/ml RNase A (QIAGEN cat# 19101)

P2 (lysis buffer): (QIAGEN cat# 19052, 500ml) 200 mM NaOH, 1% SDS

N3 (neutralization buffer for DNA binding): (QIAGEN cat# 19064, 500ml) 4.2 M guanidine hydrochloride (GuHCl), 0.9 M potassium acetate, pH 4.8

P3 (neutralization buffer for midi, maxi, giga tips): DO NOT USE for spin columns, use N3; 3.0 M potassium acetate, pH 5.5

DP3 (neutralization buffer for QIAGEN DirectPrep® 96-well miniprep): 3.0 M ammonium acetate, pH 5.5

PB (extra wash step for EndA+ strains or PCR kit): (QIAGEN cat# 19066, 500ml) 5 M guanidine hydrochloride (Gu-HCL) 30% isopropanol

5x PE (add ethanol to 80% before use): (QIAGEN cat# 19065, 100ml for making 500ml 1x PE Buffer) 80 mM NaCl, 8 mM Tris-HCl, pH 7.5 (25ºC)

EB (DNA elution buffer): 10 mM Tris-HCl, pH 8.0 or ddH2O

QG: (QIAGEN cat# 19063, 250ml) 5.5 M guanidine thiocyanate (GuSCN), 20 mM Tris-HCl, pH 6.6 (25ºC), dissolve in pH 7 standard solution or water

AE (elution buffer for genomic DNA preps): 10 mM Tris-HCl, pH 8.0 0.5 mM EDTA, pH9.0

QX1 (solubilization and binding of agarose gels): (QIAGEN cat# 20912, 500ml) 7M NaPO4 10mM NaAc, pH 5.3

QXB (for binding of large >3.0kb fragments to columns): 5M GuHCl

PAA (PAGE gel elution for DNA): 500 mM NH4Ac 100 mM MgAc2 1 mM EDTA 0.1% SDS

QBT (Equilibration buffer): (QIAGEN cat# 19054, 1L) 750 mM NaCl 50mM MOPS, pH 7.0 15% Isopropanol 0.15% Triton X-100

QC (Wash buffer): (QIAGEN cat# 19055, 1L) 1.0M NaCl 50mM MOPS, pH 7.0 15% isopropanol

QF (Elution buffer): (QIAGEN cat# 19056, 1L) 1.25M NaCl 50mM Tris-HCl, pH 8.5 15% isopropanol

QN: 1.6M NaCl 50 mM MOPS, pH 7.0 15% isopropanol

FWB2 (QIAfilter® wash buffer): 1M Potassium acetate, pH 5.0

B1 (Bacterial lysis buffer): 50 mM Tris-HCl pH 8.0 50 mM EDTA pH 8.0 0.5% Tween-20 0.5% Triton-X100 RNAse A 200 µg/l

B2 (Bacterial lysis buffer): 3M GuHCl 20% Tween-20

C1 (Cell lysis buffer): 40ºC storage 1.28 M sucrose 40 mM Tris-HCl pH 7.5 20 mM MgCl2 4% Triton X-100

G2 (Digestion buffer): 800 mM GU-HCl 30 mM Tris-HCl pH 8.0 30 mM EDTA pH 8.0 5% Tween-20 5% Triton-X100

Y1 (Yeast lysis Buffer): 40ºC storage 1 M Sorbitol 100 mM EDTA pH 8.0 14 mM beta mercaptoethanol (added just before use)

LyseBlue® (pH indicator dye, 1000x): pH shift from colorless to blue at pH 9.3; 43 mg/ml Thymophthalein in 100% ethanol