PCR Direct Kit without DNA Purification (Catalog BP2310)

4x Protein Digestion Buffer (1 mL for 50 rxn),10x PCR Enhancer (0.3 mL for 100 rxn)

Ivy Fine Chemicals Corporation, 1879 Old Cuthbert Rd, Suite 23, Cherry Hill, NJ 08034

DNA purification through sodium iodide extraction, Qiagen column, magnetic beads or phenol chloroform extraction has been absolutely required for a successful PCR reaction. The complex procedures and DNA loss during binding, precipitation and washing has caused significant variabilities among scientists and laboratories.
Here our optimized kit allows an efficient protein digestion and a simple gene quantitation by PCR or real time PCR. No sample separation and purification is necessary from our kit. No special Lab skills are required for a good PCR run.

Recommended Protein Digestion:

Note: (1) add Proteinase K (not included) to 4x Protein Digestion Buffer at 500 ug/mL final concentration and use immediately; (2) heat top (e.g. Thermocycler) and tight seal are recommended during protein digestion and Proteinase K inactivation steps to prevent evaporation and liquid loss.

Standards: 40 uL Each DNA Standard, 20 uL of 40 mg/mL Surrogate Protein, 20 uL of 4x Protein Digestion Buffer containing 500 ug/mL Proteinase K, vortex and 55℃ overnight;
Samples: 40 uL of 20 mg/mL Each Sample, 20 uL of water (non-spiked) or DNA spike, 20 uL of 4x Protein Digestion Buffer containing 500 ug/mL Proteinase K, vortex and 55℃ overnight;
Inactivation of Proteinase K: heat standards and samples at 95℃ for 5 min.

PCR or Real Time PCR: add 0.1 volume of 10 x PCR Enhancer to your routine PCR or real time PCR reaction (e.g. 3 uL to 27 uL PCR reaction).