# **PRODUCT INFORMATION**

## 10x Taq Buffer KCI and MgCI2

## **Product information for PCRB16:**

## **Product Description**

Suitable for use with magnesium chloride (Product No. MB1193) in optimizing the Polymerase Chain Reaction (PCR).

Composition of the 10X concentrate 100 mM Tris-HCl, pH 8.8 at 25 °C 500 mM KCl 0.8% (v/v) Nonidet P40 15mM MgCl2

### **PCR Suitability**

10X PCR Buffer was tested at a final concentration of 1X (10 mM Tris-HCl, pH 8.8 at 25 °C, 50 mM KCl, 0.8% (v/v) Nonidet P40), 1.5mM MgCl<sub>2</sub> in reactions containing each dNTP at 200  $\mu$ M, primers defining an approximately 500 base pair region of  $\lambda$  DNA at 1.0  $\mu$ M each,  $\lambda$  DNA template at 1 ng/100  $\mu$ l, and *Taq* DNA polymerase at 2.5 units/100  $\mu$ l. The reaction underwent 25 cycles of 94 °C to denature the double stranded DNA, 55 °C to anneal the DNA segments, and 72 °C to extend the DNA segments. Following electrophoresis of the reaction products in 1.5% agarose gel, a single band of approximately 500 base pairs was visualized for PCRs containing 1-1.5 mM MgCl<sub>2</sub>.

#### Storage:

Store at -20 °C