

## DATA QUALITY SHEET



### **2x SYBR® Green I Hot-Start real-time PCR-Mix**

FOR RESEARCH USE ONLY

Cat. GC-067-100

#### **DESCRIPTION**

*2x SYBR® Green I Hot-Start real-time PCR-Mix* is a 2x-concentrated, ready-to-use reaction cocktail containing all components, except primers, for the amplification and detection of DNA in real-time quantitative PCR with intercalating dye SYBR® Green I. Recombinant Q-Therm™ *Taq* DNA polymerase is a variant of *Taq* DNA polymerase with a genetically modified *pol* gene providing a hot start for PCR. The modification renders the enzyme inactive at 37°C. At temperatures over 68°C the enzyme restores its activity. Pre-heating at 95°C is not needed to activate this enzyme.

#### **CONCENTRATION**

2x

#### **STORAGE TEMPERATURE**

Store *2x SYBR® Green I Hot-Start real-time PCR-Mix* at -15 to -25°C. For short-term storage the master mix may be stored at +2 to +8°C. Keep the master mix away from light. Avoid repeated freezing and thawing.

#### **2X PCR MIX COMPOSITION**

Q-Therm™ *Taq* DNA polymerase 0.05 units/μl  
20 mM Tris-HCl pH 8.8 (at 25°C)  
110 mM KCl  
0.05% Tween-20  
5 mM MgCl<sub>2</sub>  
dNTPs 0.4 mM of each  
SYBR® Green I

#### **PACK SIZE GC-067-100**

2x 1,25 ml (for 100 reactions in 50 μl assay)

#### **SHELF LIFE**

2 years from date of receipt under proper storage conditions.

#### **FUNCTIONAL ANALYSIS**

Tested functionally in a unit activity test.