

# Cyxi™GREEN DNA Binding Dye

## INSTRUCTIONS FOR USE

### INTRODUCTION

Cyxi™ and Generix™ PCR mastermix reactions may be supplemented with a DNA binding dye to allow the detection of amplified products by DNA intercalation.

Cyxi™GREEN (product code: GREEN-1500-01) is a proprietary DNA binding dye specially formulated for real-time PCR applications. Cyxi™GREEN is maximally excited at ≈490nm, with a maximum emission at ≈520 nm when bound to DNA.

It may be used to complement any Fluorogenics core PCR mastermix for performing both conventional and real-time PCR amplification and/or melting point analysis.

### PROTOCOLS

#### **1. Dilution of Cyxi™GREEN to a 1:3000 working concentration.**

The product is supplied as two reagents:

- 0.5 µL Cyxi™GREEN DNA binding dye.
- 2 ml Proprietary diluent.

A 1:3000 working solution of Cyxi™GREEN reagent may be prepared by the addition of 1499.5 µL the proprietary diluent to the 0.5 µL concentrated Cyxi™GREEN dye as follows:

1. Centrifuge the Cyxi™GREEN tube to ensure the reagent is deposited at the bottom.
2. Add 499.5 µL of the supplied diluent, mix and transfer to a fresh 2 mL microfuge tube (or equivalent).
3. Add an additional 1mL of diluent to the 2 mL microfuge tube and mix.

The resulting solution is a 1:3000 dilution of Cyxi™GREEN. For best results, store in 100 µL aliquots at -20°C and protect from direct light.

#### **2. Use of Cyxi™GREEN with Cyxi™ and Generix™ PCR mastermixes**

The Cyxi™GREEN working solution may be used with Cyxi™ and Generix™ lyophilised mastermixes by the addition of 100 µL 1:3000 Cyxi™GREEN reagent to each vial. This gives a recommended final PCR reaction concentration of 1:30,000. Alternatively, Cyxi™GREEN may be added on a per reaction basis: 1µL 1:3000 Cyxi™GREEN reagent per 10 µL of final PCR reaction.

Please Refer to Cyxi™ or Generix™ PCR mastermix instructions for use for application-specific information.

### ADDITIONAL INFORMATION

Refer to Cyxi™ or Generix™ PCR mastermix instructions for use for application-specific information.

### STORAGE

Cyxi™GREEN is shipped as a wet reagent at ambient temperature but should be stored in its original packaging at -20°C. Once diluted store the Cyxi™GREEN reagent in 100 µL aliquots at -20°C.

### HANDLING AND DISPOSAL

Cyxi™GREEN reagent is designed to bind to nucleic acid and potentially mutagenic so must be handled with appropriate care. Protective laboratory clothing and disposable nitrile gloves should be worn throughout. Dispose of Cyxi™GREEN in compliance with local chemical waste regulations. See accompanying MSDS for details.

### MANUFACTURER DETAILS

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