

## qPCR with dsGreen® Dye

dsGreen is a very sensitive dye for the detection of double stranded DNA (dsDNA). Both dyes are used for non-specific detection of amplification in realtime qPCR experiments.

1. If the dsGreen reagent was stored below 20 °C, defrost it and keep it at room temperature. For rapid thawing, the reagent can be heated up to 50 °C.
2. Calculate the volumes of reagents required for the reaction according to the manufacturer's instructions to PCR reagents. Please note that the dsGreen (100x in stock) must be diluted in a PCR master-mix of up to 1x concentration.
3. Prepare a 1x master mix containing no DNA according to the manufacturer's instructions to PCR reagents, add necessary amount of dsGreen. Keep the master mix and PCR tubes on the ice if you use Taq-polymerase without hot start.
4. Transfer the master mix to tubes or plates and add DNA.
5. Proceed with amplification according to your instrument manufacturer.

### Notes:

Always include positive and negative controls in your qPCR experiments. The temperature program for qPCR amplification does not differ from a standard PCR program for the given template and primers. For detection, the FAM channel should be used. In order to be able to distinguish a specific product from primer dimers, use the melting curve step in your PCR program.

#### Lumiprobe Corporation

115 Airport Dr Suite 160  
Westminster, Maryland 21157  
USA  
Phone: +1 888 973 6353  
Fax: +1 888 973 6354  
Email: [order@lumiprobe.com](mailto:order@lumiprobe.com)

#### Lumiprobe GmbH

Feodor-Lynen-Strasse 23  
30625 Hannover  
Germany  
Phone: +49 511 16596811  
Fax: +49 511 16596815  
Email: [de@lumiprobe.com](mailto:de@lumiprobe.com)

#### Lumiprobe RUS Ltd

Kotsyubinsky street, 4  
121351 Moscow  
Russian Federation  
Phone: +7 800 775 3271  
Email: [ru@lumiprobe.com](mailto:ru@lumiprobe.com)

#### Lumiprobe Limited

Suite 12, 3/F, Great Eagle Centre  
23 Harbour Road, Wan Chai  
Hong Kong  
Mob.: +852-5929-0488 (from HK)  
Phone: +86-147-14316277 (from China)  
Email: [hk@lumiprobe.com](mailto:hk@lumiprobe.com)

#### Lumiprobe LTD

2 Tuvim St.  
3223562, Haifa  
Israel  
Phone: +972-(0)4-374-0377  
Email: [il@lumiprobe.com](mailto:il@lumiprobe.com)

#### Lumiprobe Co., Ltd.

10H-11, Shenmao Commercial Center  
No. 59 Xinwen Rd., Meiling Community  
Lianhua Street, Futian District  
Shenzhen, China  
Phone: +86-1471431-6277  
Email: [cn@lumiprobe.com](mailto:cn@lumiprobe.com)