

Technical Data Sheet

GENERAL INFORMATION

PRODUCT MasterYeast® Green for DNA samples, expressed in yeast.

Cat. No. MT05R-SDMYeast-Green

REACTIONS 500 reactions

DESCRIPTION MasterYeast®-Green for DNA samples is a 2X concentrated Hot Start PCR Master Mix, optimized for DNA amplification in conventional PCR and real-time PCR. This product provides a flexible tool that simplifies the PCR workflow and allows the amplification of DNA samples in a wide range of amplicon size (50 bp to 2 kb). MasterYeast®-Green is formed by a solution of Hot Start *Taq* DNA polymerase, a green dye, dNTPs and an optimized buffer. The user only has to add the DNA sample and primers.

This product is free from *E. coli* DNA contaminants.

PRODUCTS PROVIDED

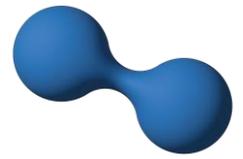
<u>Component</u>		<u>Amount</u>
01R-SDMYeast-Green	MasterYeast® Green for DNA samples.	5 vials

DELIVERY CONDITIONS

SHIPPING CONDITIONS This protein is shipped cold. Once received, store the protein at -20 °C or -80 °C.

STORAGE CONDITIONS Store it at -20 °C for medium and long term. Storage at 4 °C is possible for short term. Avoid multiple freeze/thaw cycles by storing multiple aliquots.





ADDITIONAL INFORMATION

RECOMMENDED REACTION CONDITIONS

1. Gently vortex and briefly centrifuge all solutions.
2. Prepare the following mix on ice for each 20 µL reaction.

Component	Final concentration
MasterYeast®-Green	1X
10 µM Forward Primer	0.1-0.5 µM
10 µM Reverse Primer	0.1-0.5 µM
Template DNA	<0.2 µg/20 µL
Nuclease-free water	To 20 µL

3. Gently mix the reaction and transfer tubes from ice to a PCR machine with a preheated lid to 95 °C. If using a thermocycler without a heated lid, overlay the reaction mixture with mineral oil to prevent evaporation.
4. Perform PCR using recommended thermal cycling conditions:

Step	Temperature	Time	Number of cycles
Initial denaturation	95 °C	5 min	1
Denaturation	95 °C	30 s	
Annealing	42-65 °C*	30 s	25-35
Extension	72 °C	1 min/kb	
Final extension	72 °C	5 min	1

*Annealing temperature should be optimized for each primer set based on primer T_m.

QUALITY CONTROL

THERMAL STABILITY

Levprot’s MasterYeast®-Green for DNA samples has been tested over time by keeping this product at 4 °C and -20 °C. This product maintains almost all its characteristics until the 16th freezing cycle and 29 days at 4 °C as illustrated in the following Figure.

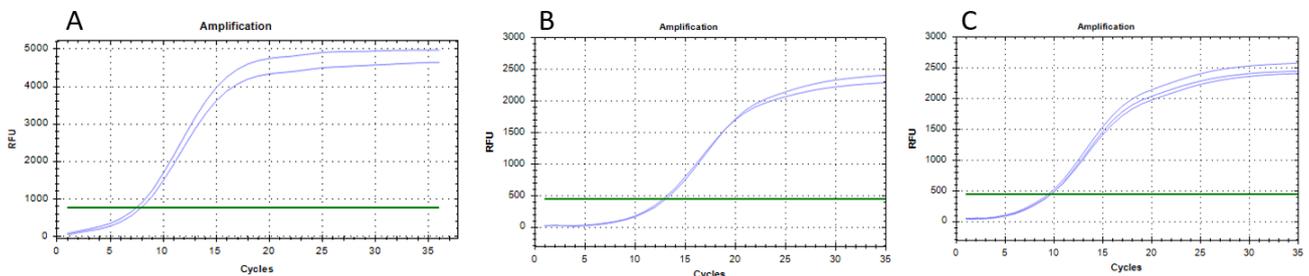
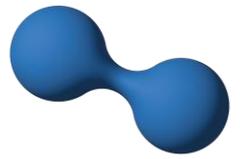


Figure. Amplification curves of MasterYeast®-Green at A) 1st day or cycle; B) after 16 freeze/thaw cycles and C) after 29 days at 4 °C.





AMPLIFICATION EFFICIENCY

Tests have been carried out to evaluate the efficiency of our product against different types of DNA, including yeast genomic DNA. Levprot’s MasterYeast®-Green shows high performance and reproducibility in its amplification efficiency, regardless of the source of the sample DNA.

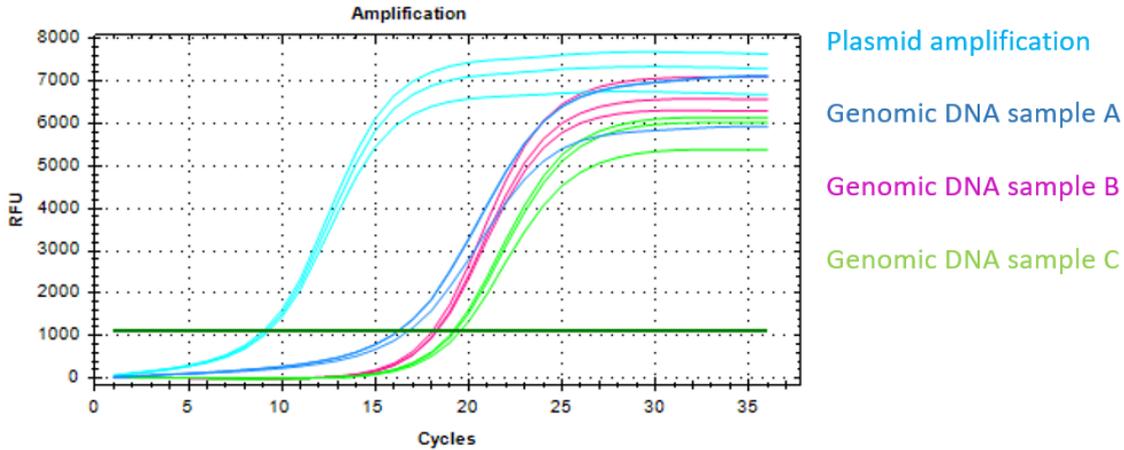


Figure. Amplification efficiency of different DNA format samples.

TECHNICAL SUPPORT

If you have any questions, feel free to contact us at support@levprot.com

Consult the Safety Data Sheet for information regarding hazards and safe handling practises.

THIS PRODUCT IS INTENDED FOR RESEARCH USE ONLY.

DATE 24/09/2024
REVISION 02

