

microGREEN qPCR 20X Dye

P. Code	Reactions (20μl)	Tubes	Component	Description	Lot Number	Expiry
MGD-Q-1	1000	1 ml	20X microGREEN qPCR Dye	Saturating, non inhibitory, intercalating dye optimized for qPCR.		

Applications

Quantitative PCR (qPCR):

- Gene expression (mRNA) analysis
- Genetic Variation analysis
- miRNA and noncoding RNA analysis
- Mutation detection

Product Description

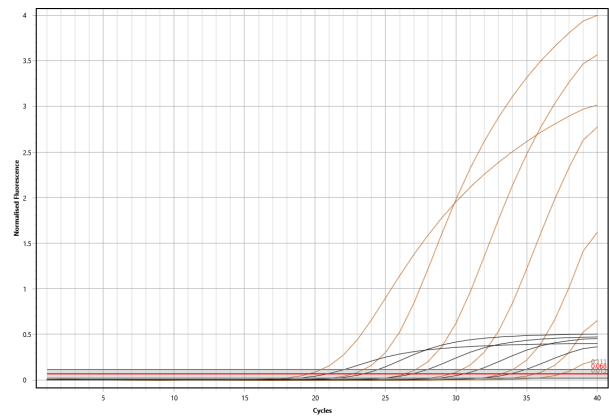
microGREEN is a third generation, saturating, intercalating fluorescent dye that binds to double stranded DNA without inhibiting PCR; making it the perfect choice for qPCR. As it can be added in larger quantities than SYBR Green I, microGREEN produce comparably much more fluorescence.

microGREEN qPCR has an excitation and emission spectrum that is very similar to SYBR Green I and therefore can be used on any qPCR instrument that is compatible with SYBR Green.

microGREEN qPCR is compatible with the majority of commercially available PCR mastermixes but is available premixed into a mastermix as MegaMix Emerald qPCR.

Key Features

- **Save Time and Money**—quickly and efficiently detect PCR amplification.
- **Compatibility** —compatible with many qPCR instruments and mastermixes.
- **Sensitivity**—high fluorescence produces improves sensitivity.
- **Reproducibility**—saturating dye produces excellent reproducibility.
- **Thermostable**—dye is extremely stable and withstands thermal cycling and freeze thawing excellently.
- **Third generation intercalating dye**— no inhibition of PCR, even at high concentrations.



MegaMix Emerald qPCR with UNG (which incorporates microGREEN qPCR) (orange) exhibits earlier Cq values and superior sensitivity vs competitor A (black), when amplifying the RNase P gene from a 6X, 1 in 10 serial dilution, of 1 μg human DNA. BMS MIC.

Protocol

This products is to be used as follows.

Thaw all reagents completely and mix well before use. Use 1X final concentration of microGREEN qPCR dye in the qPCR reaction.

The microGREEN qPCR dye has an absorption wavelength of 488 nm and a excitation wavelength of 510 nm, therefore acquisition can be performed in the FAM/SYBR channel of any compatible thermal cyclers.

Using a cycling profile that is recommended for the PCR mastermix in use and the specific annealing temperatures of the primers in use.

Note: the annealing temperatures of primers may be altered by the presence of microGREEN qPCR dye, therefore for best results an annealing gradient should be carried out in the presence of microGREEN qPCR dye.

For research use only

Product Handling

Storage

To ensure the quality of the product until the expiry date keep at the recommended storage temperature and limit exposure to light.

Contamination Control

To prevent erroneous results ensure work environment is free of contamination by cleaning your workstation and equipment with a DNA decontaminant daily, wear gloves, use sterile tubes and filter pipette tips.

Simple | Effective | Efficient