

microGREEN HRM 10X Dye

P. Code	Reactions (10 µl)	Tubes	Component	Description	Lot Number	Expiry
MGD-HRM-1	1000	1 ml	10X microGREEN HRM Dye	Saturating, non inhibitory, intercalating dye optimized for HRM.		

Applications

High Resolution Melt (HRM) analysis:

- Single Nucleotide Polymorphism (SNP) genotyping
- Methylation analysis
- Mutation scanning
- Detection of sequence variations

Product Description

HRM is a quick and simple process that allows detection of variations in DNA sequences. It enables the detection of the single nucleotide polymorphisms by distinguishing minor differences in melting curves.

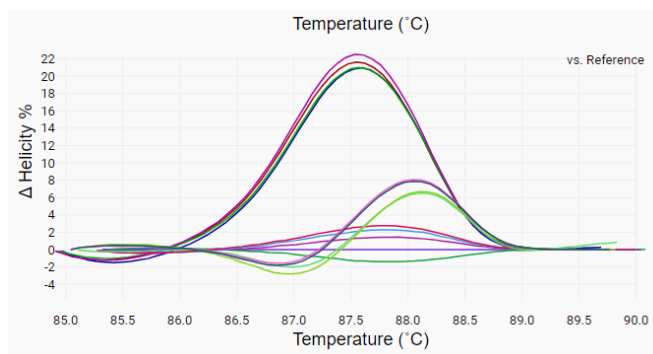
microGREEN is a third generation, saturating, intercalating fluorescent dye that binds to double stranded DNA without inhibiting PCR; making it the perfect choice for HRM.

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

Key Features

- Save Time and Money—quickly and efficiently identify sequence variations.
- Compatibility —compatible with many qPCR instruments.
- Sensitivity—detect class 4 SNP.
- Reproducibility—dye saturation ensures 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, suitable for High Resolution Melting.



HRM analysis by exponential difference plot showing detection of the rs414833 SNP amplified and melted using MegaMix HRM which incorporates microGREEN HRM. Clear differentiation between curves allows identification of the wild type, heterozygous and homozygous genotypes.

Protocol

This product is to be used as follows.

Thaw all reagents completely and mix well before use.

Use 1X final concentration of microGREEN HRM dye in the PCR -HRM reaction.

The microGREEN HRM 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 cycler.

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 HRM, therefore for best re-

sults an annealing gradient should be carried out in the presence of microGREEN HRM dye.

Follow the instrument specific guidelines for carrying out melting and HRM analysis.

Melting is nondestructive and can be repeated, heat previously amplified and/or melted samples to 95°C for 30 seconds and cool to room temperature before re-melting.

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