



## Overview

Using an innovative rotary design, the Rotor-Gene® Q MDx 5plex HRM Platform allows for unmatched thermal performance in real-time PCR cycling. The use of a rotating disc ensures that every single tube is spun in a chamber of uniform temperature, using air as the conducting element. This allows for rapid thermal cycling and precise results in all tubes.

For detection, a set of 6 uncoupled excitation and emission filters are used in conjunction with 6 dedicated LEDs to maximize the detection capability. Each tube is illuminated by the excitation LED and the fluorescent signal transmitted to the PMT detector via a uniform optical path length. This eliminates well-to-well optical variation due to edge effect which block-based cycler had experienced. It also allows for fluorescent detection without the need of a reference dye. With thermal and optical uniformity, the Rotor-Gene® Q MDx 5plex HRM Platform offers unparalleled quantitative and genotyping analysis for PCR applications.

## Optical Range

With 5 channels offering detection from the green to infrared wavelengths, the Rotor-Gene® Q MDx platform provides wide optics for most fluorophores available in the market. The decoupled filter sets create flexibility for customized excitation/detection wavelength combinations, making the platform compatible with most fluorophores.

Channel	Excitation (nm)	Detection (nm)	Examples of Fluorophores Detected
Green	470±10	510±5	FAM, YYBR Green I, Fluorescein, EvaGreen, Alexa Fluor 488
Yellow	530±5	557±5	JOE, VIC, HEX, TET, MAX, CAL Fluor Gold 540, Yakima Yellow
Orange	585±5	610±5	ROX, CAL Fluor Red 610, Cy 3.5, Texas Red, Alexa Fluor 568
Red	625±5	660±10	Cy5, Quasar 670, LightCycler Red640, Alexa Fluor 663
Crimson	680±5	712 high pass	Quasar 705, LightCycler Red 705, Alexa Fluor 680
High Resolution Melt (HRM)	460±20	510±5	SYBR Green I, SYTO 9, LC Green, LC Green Plus+, EvaGreen



Sentosa SX101



Rotor-Gene® Q MDx

## Features and Benefits

- Works in combination with Sentosa SX101 for upstream sample extraction and PCR set-up.
- Thermal non-uniformity of  $\pm 0.02^{\circ}\text{C}$ .
- 5 sets of decoupled excitation/emission filters supporting a wide variety of dyes.
- Optical uniformity allows PCR without the need of reference dye.
- Rapid thermal heating and cooling using air as conducting element.
- Optically stable LEDs with life time guarantee.
- No optical calibration required during installation.
- "Spin down" of tubes is not required.
- Optical Temperature Verification (OTV) kit available for simple thermal verification for performance without the need for contacting a service technician.
- Easy to clean, low maintenance & service requirement.
- Small footprint (W37;H27.5;D42 cm) (W14.6;H10.8;D16.5 in).

## Ordering Information

Product	Pack Size	Item No.
Sentosa SX101	1	400089
Rotor-Gene® Q MDx	1	400046

Consumables	Item No.
Rotor-Disc 72 Starter Kit (230V)	400048
Sentosa SA Reporter	480132
Rotor-Disc 72 (24)	400039
Rotor-Disc Heat Sealing Film (60)	400037