

MyGo ESR - Real Time PCR Cycler

Description

The MyGo ESR uses commercially available 0.1 ml PCR tubes with a flat cap. Individual tubes or strip tubes of 8 can be used.

Rapid heating and cooling is achieved through the use of robust Peltier elements, while assay performance is further supported by a heated lid design.

Excitation is provided by high intensity LEDs filtered to provide light at 500 nm capable of exciting all fluorophores commonly used in qPCR. A prism is used to generate spectra from the fluorescence emissions. These spectra are imaged with a CMOS camera.

Applications

- Relative and absolute quantification
- Schmelzpunktanalyse
- TaqMan genotyping
- High Resolution Melting (HRM)

Advantages at a Glance

- Small dimensions
- Low weight
- Robust design and therefore easy to transport
- Low noise (noise emission < 40dB)
- Ideal for all laboratory environments.
- Full spectrum optics (FSO) records 120 data points in the spectrum between 510 and 750 nm for all wells in each cycle.
- The cumulative signals are resolved by the software. This provides the individual parts of the characteristic fluorogen spectra.
- Reaction volumes of 10 - 100 µl are validated - i.e. also larger approaches for multiplex applications or diagnostic addiction tests.
- In addition, the instrument can be started from a USB stick with a previously created run template. A connection to a computer is not necessary.



Top Features

1. No moving parts for absolute transport safety
2. Independence from consumables
3. Optical and thermal validation possible with MyGo validation kit: important for all accredited laboratories.

Scope of Delivery MyGo ESR

- MyGo® ESR instrument
- Ethernet cable
- AC power supply
- MyGo® USB thumb drive
- Quick start user guide
- 8 well tubes (120 strips)
- 8 cap strips (120 caps)
- Heavy duty flight case

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Software

The powerful and easy-to-use software offers the following functions:

- Automated analysis modules for:
 - absolute and relative quantification
 - Melting curve analysis
 - endpoint genotyping
 - high-resolution melting (HRM)
- Quick start with templates for all important applications
- Analysis of full spectral data
- Generation of user-defined dye files for novel fluorophores
- Easy setup and editing of sample and target information
- Comprehensive data export functions
- Compatible with Windows, Mac and Linux systems
- Device startup from a USB flash drive using pre-programmed settings

Temperature Control	
Thermal system	Peltier, 99.99% silver block
Temperature range	37°C to 99°C
Speed	5°C/s Heating 4°C/s Cooling
Thermal uniformity	± 0,1 °C
Thermal accuracy	± 0,25°C
Factory calibrated dyes	SYBR Green I, ResoLight, FAM, VIC, HEX, Cy5, ROX, LC Green, SYTO 9, Cy5.5. Instrument Specific Calibration for (FAM, HEX, ROX, CY5, CY5.5) Achtung: Funktioniert nicht mit TexasRed.
Multiplex with red dyes	Yes
Supported assay formats	TaqMan®, Molecular Beacons, SimpleProbes®, Intercalators, High Resolution Melting (HRM)

Optical Data	
No. of channels	5 (Multiplex)
Fluorescence Excitation	610 nm and 450 nm (red/blue LED)
Fluorescence-Detection	510 nm to 750 nm
Detector type	CMOS array
Detection sensitivity	Single copy detection
Dynamic range	9-log
Presicion	1.1 fold discrimination

General Technical Data	
Order No. MyGo Pro ESR	112.2015
Number of wells	32 well
Tube format	0.1 ml tubes, 8 well strip tubes
Reaction volume	10 – 100 µl
Run time	<40 min (dependent on assay)
Status display	Lighting in the lid changes color
Interface	Desktop PC/laptop required Note: Protocols can be run from a preloaded USB thumb drive.
Software	Windows/Mac OS X or Linux operating software
Connetivity	LAN (RJ45), USB
Dimensions (W x D x H)	25 x 27 x 23 cm
Power consumption	170 W
Weight	7 kg
Electrical Voltage, Frequency	100 – 240 V AC +/-10%, 50 – 60 Hz +/-10%
Operation noise	<40 dB

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