Validation tools for testing PCR thermal cyclers according to legal requirements

IQ OQ PQ in place?

Traditional Thermal Cycler Validation Kit
Thermal Cycler Color Compensation Kit
qPCR Thermal Cycler Validation Kit

Products for the control of microbials in cell cultures & water.
Validation tools for testing PCR thermal cyclers according to legal requirements

ISO 17025, EN 45001, ISO 13485, ISO/TS 20836:2007, GLP, GMP, IQ/OQ/PQ, ...

Thermal Cycler Validation Kits
available for both conventional endpoint PCR and real-time PCR (qPCR) cyclers

False negative PCR results are highly critical and might be caused by a defect PCR cycler. Verification of the correct temperature control of the used equipment is usually a stressful issue. To comply with quality management systems is not easy to fulfill for PCR cyclers.

Principle
The Traditional/qPCR Thermal Cycler Validation Kits provide temperature sensitive PCR reactions to monitor an upper and lower temperature range in one run. The primer sequences in the Traditional Thermal Cycler Validation Kit respectively the primer/probe sequences in the qPCR Thermal Cycler Validation Kit in combination with a regular PCR protocol were designed to react extremely sensitive to incorrect temperature control, temperature homogeneity, precision and timing. Amplification will completely drop out at temperature differences of more than 2 °C. The cycler performance is tested at standard PCR settings to reflect most users applications. In addition, the pre-adjusted target concentrations are only amplified at high PCR efficiencies as an additional indicator for accurate temperature control of the thermal cycler.

Benefits
• No extra equipment, instrument or software needed.
• Applicable with any block PCR cycler or qPCR cycler used in a research or industrial quality assurance lab for the reliability testing of instrument performance and reliability.
• In the qPCR Thermal Cycler Validation Kit the probes of each amplification system are labeled with different fluorescent dyes (FAM™ and ROX™) to allow individual evaluation of each temperature range.
• Includes all you need: Freeze-dried primer/probe sets, polymerase, nucleotides and rehydration buffer

Cat.-No. 57-2102 Traditional Thermal Cycler Validation Kit (6 strips, 8 vials each)
Cat.-No. 57-2103 Traditional Thermal Cycler Validation Kit (100 reactions)
Cat.-No. 57-2202 qPCR Thermal Cycler Validation Kit (100 reactions)

PCR Thermal Cycler Color Compensation Kit
For real-time PCR (qPCR) thermal cyclers with optical unit equipped with filter sets for FAM™ and ROX™

Description
As real-time qPCR cyclers may vary in their fluorescence detection sensitivity, color compensation experiments must be performed on each specific multiplex PCR instrument. The Color Compensation Kit is designed for generating color compensation files on qPCR cyclers to allow proper interpretation of multiplex experiments. To generate a color compensation object, the labeled calibration dyes are used in an initial color compensation run. The calibration dyes contain labeled oligonucleotides for the determination of crosstalk corresponding to each individual dye being used in a multiplex assay, and a blank reaction buffer without dye for the determination of background fluorescence of the buffer. The result evaluation is performed by measuring the fluorescence signal with your qPCR cycler.

Kit Components
• Freeze-dried calibration dyes for 3 different wavelengths (FAM, ROX and VIC)
• Rehydration Buffer

Cat.-No. 57-0010 10 calibrations (25 µl each)