



qPCR Thermal Cycler Validation Kit

Features

Type of Thermal Cycler	Real-time PCR (qPCR) thermal cyclers with optical unit
Description	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 essential. The qPCR Thermal Cycler Validation Kit provides temperature sensitive PCR reactions to monitor an upper and lower temperature range in one PCR reaction. The probes of each amplification system are labeled with different fluorescent dyes to allow individual evaluation. The primer/probe sequences and the PCR protocol were designed to react extremely sensitive to incorrect temperature control, temperature homogeneity, precision and timing with a complete drop out of amplification at temperature differences of more than 2 °C. 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.
Recommended Use / Scope	Applicable for any real-time qPCR cycler in research or industrial quality assurance lab in order to fulfill legal requirements for the reliability testing of instruments used for analysis (ISO 17025, EN 45001, ISO 13485, GLP, GMP). The kit can be used with block as well as with air heating systems.
Kit Components	Lyophilized primer/probe sets, polymerase and nucleotides Rehydration Buffer
Package Sizes	Cat.-No. 57-2202 2 verifications
Result evaluation	Measuring fluorescence signal with PCR cycler.
Required Consumables	PCR reaction tubes
Required lab devices	Tube centrifuge Pipetting equipment qPCR cycler with filters for the detection of FAM, VIC and ROX dyes
Shelf Life and Storage	Components are maintainable at +2 to +8 °C for at least 6 months. After rehydratisation the reagents must be stored at -18 °C