

Streck ARM-D® Kits Quick Start Guide

Streck ARM-D Kits (RUO) are for Research Use Only. Not For Use in Diagnostic Procedures. CE and IVD versions of these kits are also available. These kits are for Export Only. Not for sale in the U.S.

Prior to running the Streck ARM-D® Kits, please review the product documentation located at streck.com:

- Instructions for Use (IFU)
- Data Acquisition and Analysis Guides – instrument-specific
- Frequently Asked Questions (FAQ)

Below are a few key points that should be noted prior to running the Streck ARM-D Kits. If there are any questions regarding the procedure or results, contact Streck Technical Services for assistance at 800.843.0912 or technicalservices@streck.com.

SAMPLE EXTRACTION

DNA concentrations should range from 10-200ng/μL with 260/280 absorbance ratios that range from 1.4 to 2.4. Lower ratio samples may contain PCR inhibitors and may require re-extraction.

REACTION PREPARATION

The Streck ARM-D Kits protocol requires a pipette capable of dispensing 1 μL of template DNA or Control DNA. Inaccurate pipetting at low volumes could affect results.

Be sure to use plates, strips, seals and caps that are optically clear, as other types may affect the emission and excitation spectra. The Reaction Preparation section in the FAQ includes details regarding recommended consumables.

Once the reaction mix is prepared, brief vortexing and centrifugation is necessary to ensure a homogenous reaction prior to loading the plate or tubes into the instrument.

As recommended, include one additional reaction in the master mix calculations to allow for any pipetting errors.

INSTRUMENT SET-UP

The recommended cycling protocol lists the minimum hold times for all steps. If your instrument has a default value greater than the protocol hold times, using the instrument default settings should not affect the results.

Data Acquisition and Analysis Guides are available for five platforms and include step-by-step procedures for instrument set-up, data analysis and interpretation for controls and unknowns. If a guide is not available for your instrument, the ARM-D Kits can still be used provided the instrument has the proper channels for detecting the four fluorophores required. See the IFU for these specifications.

The threshold and baseline values recommended for the ARM-D Kits may be different from the instrument's automatic settings. Refer to the respective table in the Data Acquisition and Analysis Guide for ranges.

DATA INTERPRETATION

The Control Cq expected ranges are listed for each target in the Data Acquisition and Analysis Guides; however, there are many factors that could produce Cq values outside this range. Streck Technical Services can assist with data interpretation. Providing data files and analysis settings will be helpful in determining the data validity.

Generally, the Cq values for unknown samples should be between 10–26 cycles and the range for the internal control (IC) should be between 10–20 cycles. Occasionally the Cq value may be after 26 cycles due to low target concentration. If no IC amplification is observed, the sample may be from certain bacterial strains that do not contain the conserved region of the IC gene 16S rRNA amplified in the ARM-D kits.