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## Running the Thermo Scientific Arktik Thermal Cycler

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**Protocol status:** Working

**Created:** June 27, 2017

**Last Modified:** March 15, 2018

**Protocol Integer ID:** 6589

### Abstract

Please contact Dr. Steven Wilhelm ([wilhelm@utk.edu](mailto:wilhelm@utk.edu)) for additional information regarding this protocol.

## Creating a new protocol

- 1 Press NEW from the main screen

### Note

This will show a DEFAULT protocol, which is a graphical representation of a typical PCR temperature cycling routine.

- 2 Toggle between the different steps with the cursor keys
- 3 Press ADD (F1) to add a temperature step to the left of where you want to add it
- 4 Press DELETE (F2) to delete a highlighted temperature step
- 5 To add advanced options (temperature increment, extend time or slow ramp rate, and temperature gradient) press OPTION (F3) and follow the instructions on the screen.

### Note

INC (F1) = add or subtract a temperature increment

EXT (F2) = add or subtract a time extension

RAMP (F3) = slows the ramp rate (input range = 0.1 - 0.4 degrees C/sec.

GRAD (F4) = sets a gradient

- 6 Press BACK (F4) to exit without saving
- 7 Press SAVE (F5) to save the protocol

## Running a protocol

- 8 Highlight a folder and press OPEN (F1)

- 9    Highlight the protocol and press OPEN again
- 10    Press START (F1)
- 11    Press OK (F5)
- 12    Specify the SAMPLE (F4) or BLOCK (F5) mode

**Note**

Sample mode is recommended for most protocols
- 13
- 14    Specify the vessel type by selecting UTW (F4) or COMMON (F5)
- 15    Specify the sample volume
- 16    Press YES (F4) to run the protocol