

PCR MACHINE WITH TOUCH SCREEN DISPLAY



The RevCycler is a compact, fully automated PCR machine, with a touch screen display. Constructed of rugged powder coated steel, this Peltier based affordable thermal cycler is compact, fast and ready to use.

Areas of Focus

Biotechnology
Forensics
Education
Crime labs
General lab use

Applications

PCR
Amplify DNA
Genetics
General dry bath applications

Features

48 tube capacity
Built in color touch screen control (no need for a cell phone or tablet)
Temperature graph
Heated lid
4° C cold hold
Self disinfecting block (patent pending)
Small footprint: 8" wide x 10" deep
Made in USA
2 Year Warranty

Specifications

Fast max up ramp
Fast max down ramp
Uniformity: +/- 0.25° C
Power Requirements: 100-240VAC, 50-60 Hz, 120W
Dimensions: 10in (depth) x 8in (width) x 6in (tall)

Amplify DNA fragments through Polymerase Chain Reaction

When a gene (not the entire chromosome) is in a low abundance, this quantity of the gene can be amplified in an exponential manner. Taq polymerase, a biological machine (often in the form of PCR beads) is added to the DNA sample. The tube with DNA solution is placed into a PCR machine, like the Revolutionary Science RevCycler. During the 94 Celsius denature phase, the DNA ladder denatures (separates into two half ladders) and the temperature of the PCR machine drops to the anneal temperature (usually between the temperature of 40 to 60 Celsius), so the RNA primers can attach to the gene of interest.

The next step is extend at 72 Celsius, where the RNA primers are removed and replaced with single stranded DNA, to complete two new DNA ladders. This process is repeated. Each cycle doubles the original amount of DNA. This usually continues for about 35 cycles. When the DNA is amplified it can be left in the RevCycler where it will automatically change temperature to a 4 degree Celsius refrigeration temperature hold. Amplified DNA can be stored in a freezer until analysis. Analysis can be performed with DNA electrophoresis chamber like the DNA RevBox.

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