MICRO THERMAL CYCLER WITH SELECTIVE HEAT ISOLATION

ABSTRACT

The present invention provides a micro thermal cycler for selectively controlling temperatures of reaction chambers with reaction materials. The micro thermal cycler comprises a selective insulation mechanism and a bulk heating/cooling mechanism. The present invention further provides a microfluidic device for performing chemical and biological reactions within reaction chambers of a microfluidic chip and controlling the temperatures of the reaction chambers by the micro thermal cycler.

FIG 2