

TEXT OF THE ABSTRACT

The present invention discloses a multi-flux microfluidic chip for nucleic acid detection and capable of actively controlling a flow path, and a use method thereof. The detection chip includes a chip body, and the chip body is provided with a sample loading chamber, a reaction chamber, and a microfluidic channel, where there is a plurality of reaction chambers, and the microfluidic channel includes a sample output main channel and several sample distribution channels. The sample distribution channels are separately disposed, and include sample distribution chamber sample output channels and reaction chamber sample input channels, where the sample distribution chamber sample output channels and the reaction chamber sample input channels can be communicated through sample distribution connection channels formed through heat sealing processing for a thin film on the chip body, and a thin film part of the sample distribution connection channel can form a sample distribution occlusion portion after undergoing heat sealing processing, to intercept the flow in the sample distribution channels. Therefore, the present invention uses heat sealing technology to replace a micro valve to control opening/closing of a channel, so as to decrease the number of parts mounted on the microfluidic chip, and reduce the continuous work of an instrument and energy consumption thereof. Moreover, the present invention achieves a multi-flux detection effect.