

TITLE OF INVENTION: A multifunctional microfluidic detection chip

Abstract

The invention discloses a multifunctional microfluidic detection chip. The detection chip comprises a chip body, on which a sample injection chamber, a sample quantitative chamber, a sample overflow chamber, a diluent storage chamber, a diluent quantitative chamber, a diluent overflow chamber, a quantitative mixing chamber, a reaction chamber and vent holes are disposed; a sample to be detected is injected into the sample injection chamber, and enters the sample quantitative chamber through a microfluidic channel, and the excess reaction sample enters the sample overflow chamber; a diluent in the diluent storage chamber enters the diluent quantitative chamber through a microfluidic channel, and the excess diluent enters the diluent overflow chamber; the reaction chamber includes one or more reaction cavities and a sample blank cavity; after the sample in the sample quantitative chamber is mixed with the diluent in the diluent quantitative chamber uniformly in the quantitative mixing chamber, mixed liquid enters the reaction cavities through microfluidic channels and reacts with a reaction reagent for detection, and enters the sample blank cavity at the same time as a sample blank for detection. The invention can effectively reduce the sample consumption, improve the accuracy of the detection results, and simultaneously detect multiple indicators.

[FIG. 2]

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