

## **TITLE OF INVENTION: A microfluidic blood type detection chip**

### **Abstract**

The invention discloses a microfluidic blood type detection chip. The chip comprises a chip body, and the chip body comprises: a forward typing blood type identification area, which is provided with a first sample injection chamber, a quantitative mixing chamber, a forward typing reaction chamber, and a vent hole; a reverse typing blood type identification area, which is provided with a second sample injection chamber, a quantitative separation chamber, a reverse typing reaction chamber, and a vent hole; a sample is injected into the first sample injection chamber, from which the sample and preset diluent flow into the quantitative mixing chamber through a microfluidic channel; after the sample and the diluent are mixed in the quantitative mixing chamber, they enter the forward typing reaction chamber to react with a reaction reagent for detection; a sample is injected into the second sample injection chamber, and enters the quantitative separation chamber through a microfluidic channel, the sample is separated in the quantitative separation chamber, and separated plasma enters the reverse typing reaction chamber and reacts with a reaction reagent for detection. The present invention can realize the simultaneous forward and reverse typing blood type identification, so that the results of blood type identification are more accurate.

[FIG. 2]