



# Urine Bilirubin Assay Kit

(Cat/No.:BC138 Size:50T/48S)

## 1. Principle of Measurement

Barium chloride would precipitate the bilirubin in urine and the precipitates can react with Fouchet's reagent and the bilirubin can be oxidized to blue compound, green compound and yellow compound which would turn green overall.

## 2. Compositions and Preparation (The kit is valid for 3 months)

**Reagent I:** 100g/L barium chloride solution. 1 Bottle×100 ml. Can be preserved at 4°C for 3 months.

**Reagent II:** Fouchet's Reagent. 1 Bottle×10 ml. Can be preserved at 4°C for 3 months in darkness.

## 3. Procedures

1. Add 1.5 ml reagent I solution to 3 ml urine sample and after mixing, centrifuge at 3,000 rpm for 5 min.
2. Discard the supernatant (supernatant can be used for Urobilinogen measurement) and take the pellets for measurement.
3. Drop some drops of reagent II to the pellets.

## 4. Results Analysis

Results with green or blue colors are urine bilirubin positive.

Note:

1. Bilirubin is unstable and would be decomposed rapidly with light radiation. Thus the urine
2. Alkaline solution may lower the reaction rate and thus some drops of acetic acid solution can be used to acidify the mixture prior to the measurement.
3. The reaction may be inhibited with high concentration of urine bilirubin and under such circumstance, urine should be diluted prior to the measurement.

## 5. Significance

Obstructive or hepatic jaundice may cause the increase of binding bilirubin level in serum. When the bilirubin level exceeds certain level, bilirubin may be excreted through the urine. Thus the bilirubin positive patients often suffer hepatitis or biliary obstruction cause by gallstone. For patients suffering hemolytic jaundice, the level of bilirubin in serum will not increase and the results are negatively normally.