Hemoglobin test solution

(Cat/No.:BC068 Size:1mL/35S)

1. Composition(The kit is valid for 6 months)

Hb diluent stock solution, 1mL × 1 vial, is a 100-fold concentrated stock reagent, stored at 4°C for 6 months.

2. Reagent preparation method (HICN colorimetric method)

This concentrated stock reagent (Hb diluent stock solution) is diluted with double-distilled water 1:99 before use to prepare Hb diluent application solution (i.e. add 1 mL of double-distilled water to 100 mL), mix thoroughly, and store at 4°C.

3. Operation steps

	blank tube	Sample tube
Double distilled water（mL）	0.01	
Sample to be tested (whole blood or hemolysis)（mL）		0.01
Hb diluent application solution（mL）	2.5	2.5
Mix thoroughly and let it stand for 5 minutes. The wavelength is 540nm and the light path is 1cm. Adjust to zero with double-distilled water and measure the absorbance value of each tube.		

Note: Or take 2.5mL of the diluted application solution and add 10μL of whole blood, backwash three times, mix and let stand for 5 minutes, adjust to zero with double-distilled water or diluted application solution, use 540nm, 1cm optical diameter cuvette for colorimetry, and measure each tube Absorbance (A value).

4. Calculation formula

$$\text{Hemoglobin content (g/l)} = (\text{Sample OD} - \text{Blank OD}) \times 367.7$$

5. Example

Take 10 µL of human whole blood for measurement. The OD value of the measurement tube is 0.375 and the OD value of the blank tube is 0.003. Then the hemoglobin content of the human whole blood is:

Human whole blood hemoglobin content	=	(0.375-0.003) x 367.7= 136.784 g/l

6. Precautions

1. Blood samples with high lipid levels or jaundice will significantly affect the results. For these types of whole blood, consider separating red blood cells to prepare hemolyzed blood for testing;

2. Dispose of waste reagents strictly in accordance with laboratory waste disposal methods, and take care to avoid contact between reagents and human skin.