

## BILIRUBIN - Direct

Colorimetric Method

200 Tests

### PRINCIPLE :

The reaction between bilirubin and the diazonium salt of sulphanilic acid produced azobilirubin which shows a maximum absorption at 535 nm in an acid medium. In the presence of dimethylsulfoxide ( DMSO ) the total bilirubin participate in the reaction and in the absence of ( DMSO ) only conjugated bilirubin react .

### SAMPLE :

Serum, plasma. Hemolysis will interfere with the test.  
Samples should be kept away from light.

### NORMAL VALUES :

Total bilirubin up to 1.0 mg / dL (17 $\mu$ mol/L)

Direct bilirubin up to 0.25 mg / dL (4.3 $\mu$ mol/L)

### REAGENTS :

1.	Direct bilirubin	
	Sulphanilic acid	60 mmol /L
	Hydrochloric acid	200 mmol /L
2.	Sodium nitrite	90 mmol /L

### STABILITY :

The reagents are stable up to the expiry date specified when stored at +4 to +8 °C .

### PROCEDURE :

	Direct Bilirubin	
	Blank ( ml )	Sample ( ml )
Reagent 1	1.0	1.0
Reagent 2	-	0.05
Sample	0.1	0.1

Mix. Incubate at room temperature for 10 min. away from light. Read the absorbances of the sample ( $A_{\text{Sample}}$ ) against its blank at 535 nm. ( 530 – 540 nm). using cuvettes 1 cm light path. Linearity up to 25 mg / dL (425  $\mu$ mol/L) . Color stable for one hour.

### CALCULATION :

Direct bilirubin (mg /dl) =  $A_{\text{Sample}} \times 14$

### REFERENCE :

Walter M. and Gerade H., (1970) Microchem. J. 15. 231.

### QUALITY CONTROL :

For accuracy and reproducibility control:-  
Assayed Multi – Sera, Normal and Elevated

## **BILIRUBIN - Direct**

**Colorimetric Method**  
**+4 to +8°C** **200 Tests**  
**In vitro diagnostic use**

**CAT. No.** **BR 11 12**

## **REAGENTS**

**R1 Sulphanilic acid** **2 X 100 ml**  
**R2 Sodium nitrite** **10 ml**

## **CONTACTS**

Tele: 02-33385184  
Mobil: 0109 – 349 20 77  
Fax : 02-33385184 (102)  
e.maile : [info@bio-diagnostic.com](mailto:info@bio-diagnostic.com)  
Website: [www.bio-diagnostic.com](http://www.bio-diagnostic.com)  
Adress: 29 Tahreer St., Dokki, Giza, Egypt