

## HBA1C Enzymatic (HBA1-201E)

15 months stability

### Clinical significance

In the diabetic patients, where blood glucose levels are elevated, HbA1c is formed as a consequence of the non-enzymatic glycation of the N-terminus of the  $\beta$ -chain of haemoglobin molecule.

The level of HbA1c is proportional to the level of glucose in the blood and has been widely accepted as an indicator of the mean daily blood glucose concentration over the preceding 6-8 weeks. It is therefore, a long-term indicator of diabetic control, whereas, the measurement of blood glucose is only a short-term indicator.

### Principle of the method

The whole blood is lysed and then undergoes protease digestion, which releases amino acids from the haemoglobin. Glycated valines released in this process serve as substrates for fructosyl valine oxidase (FVO) enzyme.

FVO specifically cleaves N-terminal valines, producing hydrogen peroxide, the rate of production of which can be measured spectrophotometrically.

### General features

- ✓ Enzymatic reagent
- ✓ Linearity: up to 16 %
- ✓ Measuring range: 4 to 16 %
- ✓ Reaction time: Less than 10 minutes
- ✓ On-board stability 28 days

### Reference values

ADULT 3 – 6%

 Controlled  
diabetics 6 – 9%

### Commercial info

Reference

HBA1-201E

Presentation

Liquid-stable reagent



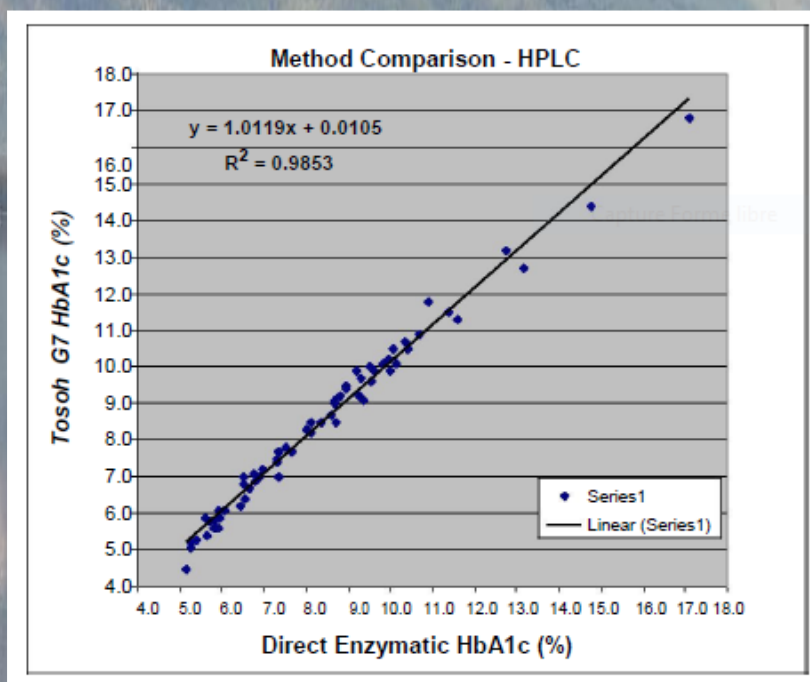
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### Precision

Within run	Mean (%)	SD	%CV	Between run	Mean (%)	SD	%CV
Level 1	5.7	0.06	1	Level 1	5.7	0.1	1.8
Level 2	10.3	0.07	0.7	Level 2	10.3	0.18	1.8

### Correlation



### Interferences

Bilirubin	up to 15 mg/dL
Ascorbic acid	up to 12 mg/dL
Glucose	Up to 4 g/dL
Triglycerides	up to 4 g/dL
Uric acid	Up to 30 mg/dL