DIABETIC BIOMARKERS



DIRECT ENZYMATIC HbA1c

SINGLE CHANNEL ASSAY IFCC CERTIFIED

510(k) Cleared **(€** Health Canada Registered

RELIABLE AND ACCURATE REGARDLESS OF THE PATIENTS HEMOGLOBIN VARIANT TYPE

- Diazyme's enzymatic HbA1c virtually eliminates interference from hemoglobin variants
- The assay's unique enzymatic methodology directly measures glycated hemoglobin and is resistant to interference from post transcript modifications

PRECISE AND ACCURATE TEST RESULTS

- The assay correlates with Tosoh HPLC and Roche Tina-Quant methods
- Inter and Intra CV's $\leq 1.8\%$ across the entire linear range of 4% 12%

SINGLE CHANNEL ASSAY OPTIMIZED FOR CONVENIENCE WITH HIGH THROUGHPUT INSTRUMENTATION

- A single instrument channel needed without a separate channel test for total hemoglobin
- Eliminates latex particle build up, thereby reducing instrument maintenance requirements
- Reagent transfer can be eliminated for most chemistry systems
- Instrument specific packaging for analyzers include:
 - o Roche Hitachi 917 Series
 - o Olympus AU (400/600/640/680)
 - o Beckman Synchron (CX, LX and DX)

COST EFFECTIVE

- Diazyme's direct enzymatic HbA1c assay has performance advantages over conventional immunoassay and chromatography methods, making it cost effective
- Minimum maintenance reporting and improved workflow
- Low reagent cost per test for virtually all laboratories



INNOVATIONS IN CLINICAL DIAGNOSTICS



Direct Enzymatic HbA1c

DIR	ЕСТ	ENZ	ZYN	
Hb/	A1C			

SINGLE CHANNEL ASSAY

Correlation bethod• N = 44 • R ² = 0.9874 • Slope = 1.0212 • y Intercept = 0.0135Linearity4.0% - 12.0%On-Board StabilityFour weeksCalibration IntervalOne weekCalibration FypeTwo pointSample Type• Whole Blood • EDTAResults FormatCan be expressed in IFCC preferred nomenclature	Method	Single channel enzymatic		
Linearity4.0% - 12.0%On-Board StabilityFour weeksCalibration IntervalOne weekCalibrationTwo pointSample Type· Whole Blood - EDTAResults FormatCan be expressed in IFCC preferred nomenclature	Correlation to HPLC Method	 N = 44 R² = 0.9874 Slope = 1.0212 y Intercept = 0.0135 		
On-Board StabilityFour weeksCalibration IntervalOne weekCalibrationTwo pointSample Type·Whole Blood · EDTAResults FormatCan be expressed in IFCC preferred nomenclature	Linearity	4.0% - 12.0%		
Calibration IntervalOne weekCalibrationTwo pointSample Type· Whole Blood · EDTAResults FormatCan be expressed in IFCC preferred nomenclature	On-Board Stability	Four weeks		
CalibrationTwo pointSample Type• Whole Blood • EDTAResults FormatCan be expressed in IFCC 	Calibration Interval	One week		
Sample Type• Whole Blood - EDTAResults FormatCan be expressed in IFCC 	Calibration	Two point		
ResultsCan be expressed in IFCCFormatpreferred nomenclature	Sample Type	• Whole Blood - EDTA		
	Results Format	Can be expressed in IFCC preferred nomenclature		

Assay Method



This diagram is for a 2-reagent system

Parameter questions for Direct Enzymatic HbA1c assay should be addressed to Diazyme technical support. Please call 858.455.4768 or email <u>support@diazyme.com</u>

EFFICIENT AND CONVENIENT

- Single channel assay eliminates the need for a dedicated channel for total hemoglobin measurement
- Fully enzymatic, no latex particle residue to cloud cuvettes
- Liquid stable with a variety of instrument specific packaging options for Roche Hitachi, Beckman Synchron and Olympus Chemistry Analyzers

RELIABLE AND ACCURATE

- No interference from major hemoglobin variants including HbS, HbC, HbE
- No interference from carbamylated Hb, acetylated Hb or labile HbA1c
- IFCC certified, excellent correlation to HPLC and Immunochemical methods

PRECISE

• CV's $\leq 1.8\%$ - from 4% to 12% HbA1c

Precision per NCCLS-EP-5

	Level 1: (% HbA1c)	Level 2: (% HbA1c)
Mean	5.7%	10.3%
Within-Run SD	0.06	0.07
Within-Run CV%	1.0%	0.7%
Total SD	0.10	0.18
Total CV%	1.8%	1.8%

DIAZYME LABORATORIES

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