MEET THE ELECTROLYTES

Electrolyte Marker

INTRODUCING DIAZYME'S ENZYMATIC ELECTROLYTE ASSAYS

Sodium | Potassium | CO_2

- An alternative to high priced ISE methods
- Eliminates the need for electrode maintenance
- Liquid stable reagent and calibrator requires no preparation
- Accurate and precise
- Traceable to NIST standard and ISE method
- Wide range of instrument parameters available for simplifying implementation
- Low cost per test

DIAZYME

Innovations in Clinical Diagnostics

ENZYMATIC ELECTROLYTE ASSAYS

Dual Vial
Liquid Stable

	Sodium	Potassium	CO_2
Method	Enzymatic - A sodium dependent β-galactosidase cleaves ONPG substrate. The product O-nitrophenyl is read at 405 nm and is proportional to the sodium concentration	Enzymatic – A potassium dependent pyruvate kinase catalyzes the conversion of NADH analog to NAD analog which is measured at 380 nm and is proportional to the potassium concentration	The assay is based on a coupled reagent with phosphoenolpyruvate carboxylase (PEPC) and malate dehydrogenase (MDH). The decrease in absorbance at 405 or 415 nm is directly proportional to CO_2 concentration in the sample
Traceability	NIST standard and ISE method	NIST standard and ISE method	NIST standard and ISE method
Method Correlation to Predicate	$R^2 = 0.9801$ regression $y = 1.0516x - 2.2343$	$R^2 = 0.98$ regression $y = 1.07x - 0.30$	$R^2 = 0.99$ regression $y = 1.0447x - 0.9742$
Precision	**The Within-Run CVs** 1.2% at 137 mmol/L 1.1% at 160 mmol/L **The total CVs** 1.56% at 137 mmol/L 1.65% at 160 mmol/L	**The Within-Run CVs** 1.12% at 4.46 mmol/L 1.20% at 6.86 mmol/L **The total CVs** 1.77% at 4.46 mmol/L 1.77% at 6.86 mmol/L	**The Within-Run CVs** 2.3% at 25 mmol/L 2.3% at 40 mmol/L **The total CVs** 2.8% at 25 mmol/L 3.3% at 40 mmol/L
Reagent On-Board Stability*	4 weeks	2 weeks	4 weeks
Calibrator	Liquid stable calibrator set, no serial dilutions are required	Liquid stable calibrator set, no serial dilutions are required	Liquid stable calibrator set, no serial dilutions are required
Sample Type	Serum	Serum	Serum, Heparinized Plasma
Sample Volume	8 µL	5 µL	3 µL
Linearity	80 - 180 mmol/L	2 - 8 mmol/L	1.12 - 50 mmol/L
Regulatory Status	• 510(k) Cleared • CE 2797	• 510(k) Cleared • CE 2797	• 510(k) Cleared • CE

****Analyzer Dependent***

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