



ENZYMATIC LITHIUM ASSAY

LIQUID STABLE ASSAY

510(k) Cleared 
Health Canada Registered

AN ALTERNATIVE TO HIGH PRICED ISE ASSAYS

- Accurate and precise test results
- Traceable to NIST standards
- Not light sensitive
- Not affected by atmospheric CO₂
- Low cost per test

CONVENIENT LIQUID STABLE METHOD

- Highly stable enzymatic method
- Robust performance with excellent on-board reagent stability and calibration curve stability
- Hassle free with no sample preparation (dilution) needed
- Eliminate reagent transfer with instrument specific analyzer packaging options for:
 - o Roche Hitachi
 - o Beckman Synchron





ENZYMATIC LITHIUM ASSAY

LIQUID STABLE ASSAY

Lithium

Method	Enzymatic - A lithium sensitive phosphatase catalyzes the conversion of adenosine biphosphate (PAP) to hypoxanthine and hydrogen peroxide which is then quantified by a Trinder reaction
Traceability	Lithium calibrator and control are traceable to NIST standard and an ISE method
Method Correlation to Predicate	$R^2 = 0.99$ regression $y = 1.03x - 0.04$
On-Board Stability*	8 weeks
Calibrator	Liquid stable calibrator set, no serial dilutions are required
Sample Type	Serum
Sample Volume	5 μ L
Assay Range	0.19 - 3.0 mmol/L
Instrument Specific Packaging	Universal kit packaging Beckman • Synchron Roche • Hitachi
Regulatory Status	• 510 (k) Cleared • CE • Health Canada

Assay Procedure



Parameter questions for Lithium assay should be addressed to Diazyme technical support. Please call 858.455.4768 or email support@diazyme.com

ACCURATE

- Highly lithium specific with less interference

CONVENIENT

- Neutral pH, not corrosive to instruments, and not hazardous to ship
- Extensive range of instrument parameters

PRECISE

- Diazyme's Liquid Stable Enzymatic Lithium Assay precision was evaluated according to NCCLS EP5-A guidelines
- Performance studies were conducted using the Hitachi 717 automated chemistry analyzer:

Within Run Precision

	1.0 mM Li+ (10 days, n=4)	2.5 mM Li+ (10 days, n=4)
Mean	0.97 mM	2.50 mM
CV%	4.3%	1.2%

Total

	1.0 mM Li+ (10 days, n=4)	2.5 mM Li+ (10 days, n=4)
Mean	0.97 mM	2.50 mM
CV%	4.8%	1.3%



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