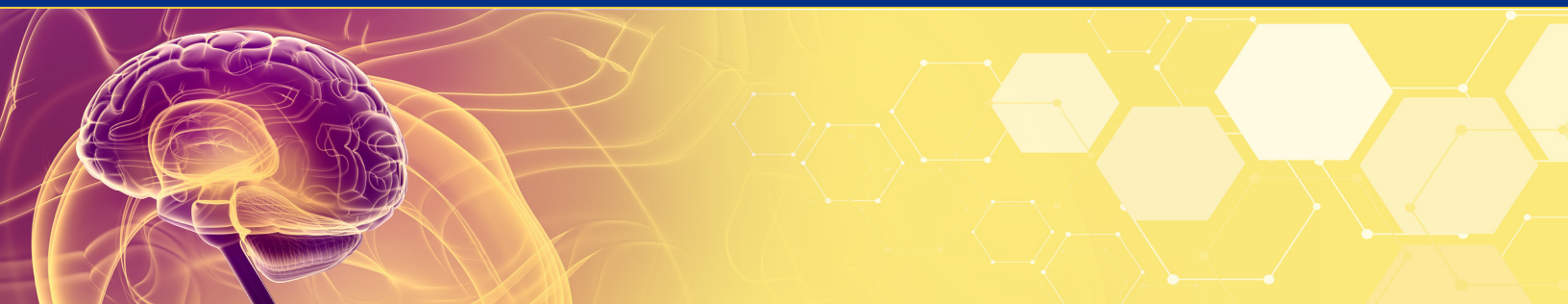


# ENZYMATIC LITHIUM ASSAY





## *Therapeutic Drug Monitoring*

### **DIAZYME ENZYMATIC LITHIUM ASSAY ADVANTAGES**

- Highly stable enzymatic method for accurate and precise test results
- Low sample volume vs. ISE methods
- Convenient liquid stable reagent set
- Traceable to NIST standards
- Not light sensitive
- Low cost per test
- Robust performance with excellent on-board reagent stability and calibration curve stability
- Neutral pH, not corrosive to instruments, and not hazardous to ship
- Wide range of instrument parameters available for simplifying implementation
- Excellent within run precision ( $\leq 4.3$  CV%)

### **REGULATORY STATUS**

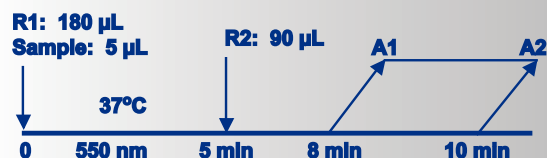
510(k) Cleared; EU:    
Health Canada Registered



## ASSAY SPECIFICATIONS

<b>Method</b>	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
<b>Sample Type &amp; Volume</b>	<ul style="list-style-type: none"> <li>Serum</li> </ul> Sample Volume 5 $\mu$ L
<b>Method Correlation to Predicate</b>	$R^2 = 0.99$ regression $y = 1.03x - 0.04$
<b>Traceability</b>	Traceable to NIST SRM 956 standard
<b>Calibrator</b>	Liquid stable calibrator set
<b>Linearity</b>	0.19 - 3.0 mmol/L
<b>Reagent On-Board Stability*</b>	8 weeks when stored at 2-8°C

### Assay Procedure\*



\*Analyzer Dependent

Parameter questions for Lithium assay should be addressed to Diazyme technical support. Please call 858.455.4768 or email [support@diazyme.com](mailto:support@diazyme.com)

## ASSAY PRECISION

Diazyme's Liquid Stable Enzymatic Lithium Assay precision was evaluated according to NCCLS EP5-A guideline. 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)
<b>Mean (mM)</b>	0.97	2.50
<b>CV (%)</b>	4.3	1.2

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

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