

Lithium (Enzymatic) Assay (Liquid Stable)

Product Features

Diazyme's enzymatic liquid stable lithium assay provides a convenient, non-caustic low cost alternative to expensive ISE and highly caustic alkaline lithium methods. Diazyme's enzymatic lithium assay demonstrates an excellent correlation with the ISE methods and offers excellent precision (%CV <5%) and demonstrates no significant interference from all tested endogenous ions as well as ascorbic acid (5.0 mM), triglycerides (250 mg/dL), and bilirubin (45 mg/dL).



Assay Principle

The Diazyme enzymatic Lithium assay is based on a lithium sensitive enzyme whose activity is lithium concentration dependent. The enzyme, a phosphatase, converts its substrate adenosine biphosphate (PAP) to hypoxanthine through a coupled enzymatic reactions to generate uric acid and hydrogen peroxide (H₂O₂). H₂O₂ generated is then quantified by a Trinder reaction.

Intended use

For the quantitative *in vitro* determination of lithium in serum samples. Serum levels of lithium are monitored when patients received therapeutic lithium for treatment of diseases such as bipolar disorder (manic depressive psychosis).

Product	Catalog Number	Packaging	Method/Format
Kit (200 Tests)	DZ116B-K	R1: 2 x 20 mL R2: 2 x 10 mL	Enzymatic/Kinetic Liquid stable
Calibrator	DZ116A-Cal	3 x 3 mL	
Control	DZ116A-Con	2 x 3 mL	