

Technical Data Sheet

EASI-EXTRACT® VITAMIN B12 (LGE)

Art. No. P88 / P88B

1. Kit Contents

10 or 50 large reservoir format immunoaffinity columns for use with HPLC or LC-MS/MS.

2. Specifications

Specificity	Cyanocobalamin (Used to measure total vitamin B12)	
LOD*	Cyanocobalamin	5 ng/ml
Recoveries for Spiked Solutions	RBR QC Specification: Cyanocobalamin	85 - 110 %
Intra-Assay CV	<10 %	
Inter-Assay CV	<10 %	
Storage Conditions	2 - 8 °C (or at 21 - 25 °C)	
Shelf Life	18 Months (or 12 Months)	

* LOD determined by RBR and is dependent on method, HPLC conditions and HPLC equipment used.

3. Method Information

Approval	AOAC Official Method 2011.08 (First Action) AOAC Official Method 2014.02 (First Action)	
Extraction	Sodium Acetate Buffer	
Enzymes	α-amylase	
Additional Requirements	1 % Sodium or Potassium Cyanide Solution	
Clean-Up Time	2 hours prior to detection by HPLC or LC-MS/MS	
Wash Solution	Water	
Elution Solution	100 % Methanol	
Injection Volume	100 µl	
HPLC System	UV	
HPLC Pump	Isocratic	
Analytical Column	ACE AQ-C18 3 µm, 150 mm x 3 mm	
Derivatisation	N/A	

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4. Recovery Data Using Recommended Methods

Sample	Vitamin B12 Claim	Number of Analyses	Vitamin B12 Concentration Recovered
Infant Formula	1.29 µg/100 g	6	1.72 µg/100 g
Infant Formula	1.20 µg/100 g	6	1.43 µg/100 g

Methods for the analysis of the above commodities are available on request. Various posters and publications are available providing additional validation data. Please contact your local R-Biopharm distributor for further information.

5. Example Chromatogram (Spiked Solution at 150 ng)

