



## CERTIFICATE OF ANALYSIS

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### 1. Identification

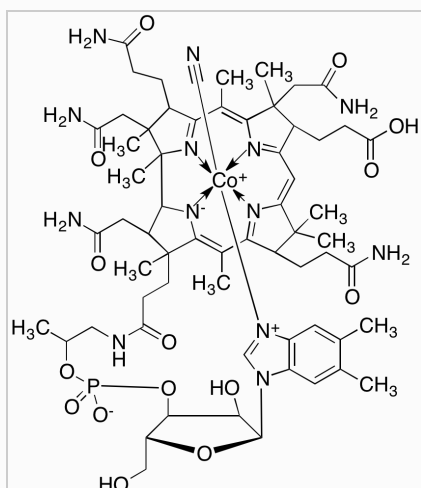
**Catalogue Number:** C953623

**CAS Number:** 38218-55-2

**Synonym:** 3'-Ester with 5,6-Dimethyl-1- $\alpha$ -D-ribofuranosylbenzimidazole Cobinic Acid-abceg-pentamide Cyanide Phosphate Inner Salt; 3'-Ester with 5,6-Dimethyl-1- $\alpha$ -D-ribofuranosyl-1H-benzimidazole Cobinic Acid-abceg-pentamide Cyanide Dihydrogen Phosphate (Ester) Inner Salt; 3'-Ester with (5,6-Dimethyl-1- $\alpha$ -D-ribofuranosyl-1H-benzimidazole- $\kappa$ N3) Cobinic Acid-abceg-pentamide Co-(cyano- $\kappa$ C)-Dihydrogen Phosphate (Ester) Inner Salt; CBC 226; Cobalamin-d-monoacid Cyanide

**Product:** Cyanocobalamin-d-carboxylic Acid

**Structure:**



**Molecular Formula:**

$C_{63}H_{87}CoN_{13}O_{15}P$

**Molecular weight:**

1356.35

**Source of Product:**

Synthetic

**Solubility:**

Methanol (Slightly), Water (Slightly)

**Lot Number:** 12-AQL-22-5

**Purity:** 98%

**Shipping Condition:** This Product Is Stable To Be Shipped At Room Temperature

**Storage Condition:** -20°C

### 2. Warning

**Warning 1:**

**Warning 2:**

**Warning 3:**

### 3. Analytical Information

Tests:	Specifications:	Results:
Appearance	Red to Dark Red Solid	Red to Dark Red Solid
NMR	Conforms to Structure	Conforms
P NMR	Conforms to Structure	Conforms
Elemental Analysis	Conforms	%C: 52.59, %H: 6.79, %N: 12.92
HPLC Purity	Report Result	99.13% (205 nm)
MS	Conforms to Structure	Conforms
FT-IR	Conforms to Structure	Conforms
Water Content	Report Result	~6.2% based on Elemental Analysis

**Additional Information:** N/A

Purity is based on the analytical results of the tests performed. NMR and Elemental Analysis (if available) may have an accuracy of  $\pm 2\%$ . Isotopic purity is based on mass distribution observed. The contents of the specifications are subject to change without advance notice, and the specification values displayed here are the most up to date values.

#### 4. Signatures

**Reviewed By**

Evan Burns

Evan Burns

**Reviewed By**

Toni Rantanen



**C of A Approved  
By**

Chanell Chu



**Test Date**

11/26/2021

**Retest Date**

11/24/2025