Data Sheet (Cat.No.T1040)



Vitamin B12

Chemical Properties

CAS No.: 68-19-9

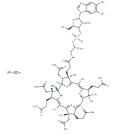
Formula: C63H88CoN14O14P

Molecular Weight: 1355.37

Appearance: no data available

Storage: keep away from direct sunlight

Powder: -20°C for 3 years | In solvent: -80°C for 1 year



Biological Description

| Description | Cyanocobalamin is a cobalt-containing coordination compound generated by intestinal microbes and a natural water-soluble vitamin of the B-complex family that must |
|---------------|---|
| | combine with Intrinsic Factor for absorption by the intestine. Cyanocobalamin is necessary for hematopoiesis, neural metabolism, DNA, and RNA production, and carbohydrate, fat, and protein metabolism. B12 improves iron functions in the metabolic |
| | cycle and assists folic acid in choline synthesis. B12 metabolism is interconnected with that of folic acid. Vitamin B12 (Cobalamin) deficiency causes pernicious anemia, megaloblastic anemia, and neurologic lesions. |
| Targets(IC50) | Endogenous Metabolite |

Solubility Information

| Solubility | Ethanol: 10 mg/mL (7.38 mM), Sonication is recommended. | | |
|------------|---|--|--|
| | H2O: 6 mg/mL (4.43 mM), Sonication is recommended. | | |
| | DMSO: 2.71 mg/mL (2 mM), Sonication is recommended. | | |
| | (< 1 mg/ml refers to the product slightly soluble or insoluble) | | |

Preparing Stock Solutions

| | 1mg | 5mg | 10mg |
|-------|-----------|-----------|-----------|
| 1 mM | 0.7378 mL | 3.689 mL | 7.3781 mL |
| 5 mM | 0.1476 mL | 0.7378 mL | 1.4756 mL |
| 10 mM | 0.0738 mL | 0.3689 mL | 0.7378 mL |
| 50 mM | 0.0148 mL | 0.0738 mL | 0.1476 mL |

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Page 1 of 2 www.targetmol.com

Reference

Ghazanfari S, et al. Drug Res (Stuttg). 2014 Mar;64(3):113-7.

Inhibitor • Natural Compounds • Compound Libraries • Recombinant Proteins

This product is for Research Use Only• Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E_mail:info@targetmol.com Address:36 Washington Street,Wellesley Hills,MA 02481

Page 2 of 2 www.targetmol.com