Taiclone®
Quality Guarantee

Web: www.taiclone.com
Tel: +886-2-2735-9682
Email: order@taiclone.com

Vitamin B12

Catalog No: tcsc2354

Available Sizes

Size: 500mg

Specifications

CAS No:
68-19-9

Formula:
$C_{63}H_{88}CoN_{14}O_{14}P$

Pathway:
Others

Target:
Others

Purity / Grade:
>98%

Solubility:
10 mM in DMSO

Alternative Names:
Cyanocobalamin

Observed Molecular Weight:
1355.37

Product Description

Vitamin B12 is a water soluble vitamin with a key role in the normal functioning of the brain and nervous system, and for the formation of blood.

Target: Others

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Vitamin B12 is a water-soluble vitamin with a key role in the normal functioning of the brain and nervous system, and for the formation of blood. It is one of the eight B vitamins. It is normally involved in the metabolism of every cell of the human body, especially affecting DNA synthesis and regulation, but also fatty acid synthesis (especially odd chain fatty acids) and energy production.

Vitamin B12 normally plays a significant role in the metabolism of every cell of the body, especially affecting the DNA synthesis and regulation but also fatty acid synthesis and energy production. However, many (though not all) of the effects of functions of B12 can be replaced by sufficient quantities of folic acid (vitamin B9), since B12 is used to regenerate folate in the body. Most vitamin B12 deficiency symptoms are actually folate deficiency symptoms, since they include all the effects of pernicious anemia and megaloblastosis, which are due to poor synthesis of DNA when the body does not have a proper supply of folic acid for the production of thymine due to methyl trapping. When sufficient folic acid is available, all known B12 related deficiency syndromes normalize, save those narrowly connected with the vitamin B12-dependent enzymes Methylmalonyl Coenzyme A mutase, and 5-methyltetrahydrofolate-homocysteine methyltransferase (MTR), also known as methionine synthase; and the buildup of their respective substrates (methylmalonic acid, MMA) and homocysteine.Coenzyme B12\'s reactive C-Co bond participates in three main types of enzyme-catalyzed reactions [1, 2].