

Product Name	: Adenosylcobalamin
Synonyms	: Coenzyme B12, Cobamamide, AdoCbl
Cat No.	: M22704
CAS Number	: 13870-90-1
Molecular Formula	: C72H99CoN18O17P
Formula Weight	: 1578.57
Chemical Name	: —
Description	Adenosylcobalamin is a biologically active form of vitamin B12. It is a cofactor for methylmalonyl CoA mutase. It belongs to the corrinoid group of compounds, which contain a corrin macrocycle, and is produced only by certain bacteria and archaea. It is a cofactor for various enzymes including mutases, eliminases, aminomutases, and a reductase. Adenosylcobalamin serves as the cofactor for a group of enzymes that catalyze unusual rearrangement or elimination reactions.
Pathway	: Proteasome/Ubiquitin
Target	: Endogenous Metabolite
Receptor	: Human Endogenous Metabolite
Solubility	: H2O: 4 mg/mL (2.53 mM)
SMILES	<chem>[CH2-][C@H]1O[C@@H]([C@@H](O)[C@H]1O)n1cnc2c(N)ncnc12.[H][C@]12[C@H](CC(N)=O)[C@@](C)(CCC(=O)NC[C@H](C)OP([O-])(=O)O[C@@H]3[C@@H](CO)O[C@@H]([C@@H]3O)n3cnc4cc(C)c(C)cc34)\C([N-]1[Co+3])=C(C)\C1=N/C(=C/C3=N/C(=C(C)\C4=N[C@]2(C)[C@@](C)(CC(N)=O)[C@@H]4CCC(N)=O)[C@@](C)(CC(N)=O)[C@@H]3CCC(N)=O)C(C)(C)[C@@H]1CCC(N)=O</chem>
Storage	: (-20°C)
Stability	: ≥ 2 years
Reference	:

1. Kumudha A, et al. Characterization of vitamin B12 in Dunaliella salina. J Food Sci Technol. 2016 Jan;53(1):888-94.