## For Research Use Only

## **I-Nicotinamide mononucleotide**



www.ptgcn.com

Catalog Number: CM01907

产品信息

Catalog Number: CM01907

CAS号: 1094-61-7

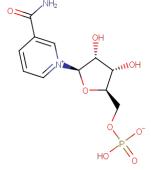
分子式: C<sub>11</sub>H<sub>15</sub>N<sub>2</sub>O<sub>8</sub>P

Others Endogenous Metabolite

主要通路: 代谢|其他

分子量: 334.22 溶解度:

H2O:10 mM,DMSO:Insoluble



描述

 $\beta$  -Nicotinamide mononucleotide ( $\beta$  -NM) is an important intermediate metabolite in the nicotinate and nicotinamide metabolism pathway. Mammals predominantly use nicotinamide rather than nicotinic acid as a precursor for NAD biosynthesis. Instead of the deamidation to nicotinic acid, nicotinamide is directly converted to β-Nicotinamide mononucleotide by nicotinamide phosphoribosyltransferase (NAMPT, EC 2.4.2.12). The enzyme nicotinamide mononucleotide adenylyltransferase (NMNAT, EC 2.7.7.1), which is a member of the nucleotidyltransferase alpha/beta-phosphodiesterase superfamily, catalyzes the reaction  $\beta$  -Nicotinamide mononucleotide + ATP <=> Nicotinamide adenine dinucleotide (NAD) + PPi, representing the final step in the biosynthesis of NAD. NAD is a molecule that plays a fundamental role as a cofactor in cellular redox reactions. Thus  $\beta$ -Nicotinamide mononucleotide is an important metabolite for the maintenance of normal NAD biosynthesis. Circulating  $\beta$ -Nicotinamide mononucleotide levels may play an important role in regulating cell function in physiological and pathophysiological conditions.

Powder: -20°C for 3 years | In solvent: -80°C for 2 years