Data Sheet (Cat.No.T13795)

TargetMol

Nicotinamide riboside

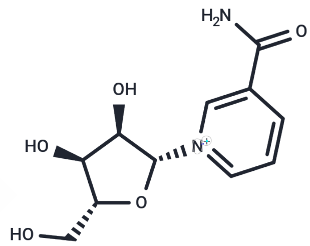
Chemical Properties

CAS No. : 1341-23-7

Formula: C11H15N2O5

Molecular Weight: 255.25

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.



Biological Description

Description	Nicotinamide riboside increases NAD[+] levels and activates SIRT1 and SIRT3, culminating in enhanced oxidative metabolism and protection against high fat diet-induced metabolic abnormalities.
Targets(IC50)	Endogenous Metabolite,Sirtuin
In vitro	Nicotinamide riboside (NR) supplementation in mammalian cells and mouse tissues increases NAD(+) levels and activates SIRT1 and SIRT3, culminating in enhanced oxidative metabolism and protection against high-fat diet-induced metabolic abnormalities.
In vivo	The natural vitamin Nicotinamide riboside (NR) could be used as a nutritional supplement to ameliorate metabolic and age-related disorders characterized by defective mitochondrial function.

Solubility Information

Solubility	DMSO: 125 mg/mL (489.72 mM),Sonication is recommended. H2O: 50 mg/mL (195.89 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.9177 mL	19.5886 mL	39.1773 mL
5 mM	0.7835 mL	3.9177 mL	7.8355 mL
10 mM	0.3918 mL	1.9589 mL	3.9177 mL
50 mM	0.0784 mL	0.3918 mL	0.7835 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.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Cantó C, et al. The NAD(+) precursor nicotinamide riboside enhances oxidative metabolism and protectsagainst high-fat diet-induced obesity. Cell Metab. 2012 Jun 6;15(6):838-47.

Zhao S, Hong Y, Liang Y, et al. Compartmentalized regulation of NAD+ by Di (2-ethyl-hexyl) phthalate induces DNA damage in placental trophoblast. Redox biology. 2022, 55: 102414.

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