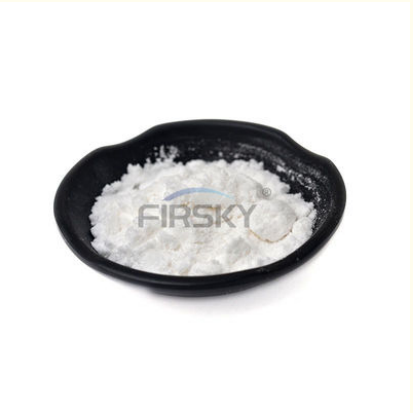
Nootropic Supplement Nad (NAD+) Lyophilized Powder CAS 53-84-9

Our Product Introduction

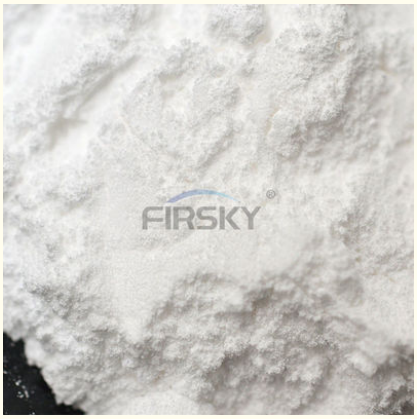
Basic Information

- Place of Origin: China
- Brand Name: Firsky
- Model Number: FS-53-84-9
- Minimum Order Quantity: 1KG
- Packaging Details: 1kg, 5kg, 15kg, 20kg, 25kg can be packed in different specifications. Packaging can be customized according to customer requirements. Aluminium foil bag and carton.
- Delivery Time: 7-15days
- Payment Terms: T/T, Western Union, MoneyGram
- Supply Ability: 2000T



Product Specification

- Product Name: β-Nicotinamide Adenine Dinucleotide
- CAS NO: 53-84-9
- Purity: 99%
- Shelf Life: 2 Years



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Product Description

Specifications:

Product Name:	β-Nicotinamide Adenine Dinucleotide
Synonyms:	Adenosine 5'-(Trihydrogen Diphosphate), P'→5'-Ester with 3-(Aminocarbonyl)-1-β-D-ribofuranosylpyridinium Hydroxide, Inner Salt; ?Pyridinium, 3-Carbamoyl-1-β-D-ribofuranosyl-, Hydroxide, 5'→5'-Ester with Adenosine 5'-(Trihydrogen Pyrophosphate), Inner Salt (8CI); Adenine-nicotinamide Dinucleotide; CO-I; Codehydrase I; Codehydrogenase I; Coenzyme I; Cozymase I; DPN; ? Diphosphopyridine Nucleotide; Enzopride; NAD; NAD+; NSC 20272; Nadide; ?Nicotinamide-adenine Dinucleotide; Oxidized Diphosphopyridine Nucleotide; ?β-Diphosphopyridine Nucleotide; β-NAD; β-NAD+; ?β-Nicotinamide Adenine Dinucleotide; β-Nicotinamide Adenine Dinucleotide Hydrate;
CAS NO:	53-84-9
EINECS No.:	200-184-4
Molecular Formula:	$C_{21}H_{27}N_7O_{14}P_2$
Molecular Weight:	663.43
Melting Point:	140-142 °C (decomp)
Appearance:	White powder
Storage:	-20°C Freezer, Under inert atmosphere
Solubility:	Water (Heated)

Description:

β-Nicotinamide adenine dinucleotide (β-NAD+) is a coenzyme that plays a vital role in numerous biological functions. Here are some of the key properties and applications of β-NAD+:

Cellular Energy Metabolism: β-NAD+ is a key player in cellular energy production. It serves as a coenzyme in important metabolic pathways such as glycolysis, citric acid cycle, and oxidative phosphorylation. By facilitating electron transfer, beta-NAD+ aids in the synthesis of adenosine triphosphate (ATP), the cell's primary energy currency.

Redox reactions and antioxidant defense: β-Nicotinamide adenine dinucleotide participates in redox reactions and helps maintain cellular redox balance. It serves as a substrate for enzymes involved in antioxidant defense, such as NAD(P)H oxidase and NAD(P)H quinone oxidoreductase. Beta-NAD+ supports the neutralization of reactive oxygen species (ROS) and helps protect cells from oxidative stress.

DNA Repair and Genome Stability: β-NAD+ is essential for the DNA repair process and maintaining genome stability. Enzymes such as poly(ADP-ribose) polymerase (PARP) utilize β-NAD+ as a substrate to promote DNA repair mechanisms. Optimal β-NAD+ levels are essential for efficient DNA repair and maintenance of genetic integrity.

Anti-Aging and Age-Related Diseases: β-Nicotinamide adenine dinucleotide has attracted attention in the field of aging research. Decreased β-NAD+ levels are associated with aging and age-related diseases. Researchers are exploring strategies to replenish β-NAD+ levels using β-nicotinamide mononucleotide (β-NMN) and nicotinamide riboside (NR) supplements. These approaches are designed to support cellular health and potentially mitigate age-related physiological decline.

In summary, β-nicotinamide adenine dinucleotide (β-NAD+) is a valuable compound with multiple applications in research, pharmaceuticals, and cell biology. Its role in cellular energy metabolism, antioxidant defense, DNA repair and potential anti-aging effects make it an important asset across a variety of industries.

Application:

β-Nicotinamide adenine dinucleotide (β-NAD+), CAS 53-84-9, is a coenzyme involved in a variety of biological processes. Here are some key applications of β-nicotinamide adenine dinucleotide:

1. Cellular energy production: β-Nicotinamide adenine dinucleotide plays a vital role in cellular energy metabolism. It serves as a coenzyme in key metabolic pathways such as glycolysis, citric acid cycle, and oxidative phosphorylation. Beta-NAD+ facilitates electron transfer during these processes, helping to produce adenosine triphosphate (ATP), the cell's primary energy currency.

2. Oxidative stress and antioxidant defense: β-NAD+ participates in the antioxidant defense mechanism within cells. It serves as a substrate for enzymes such as NAD(P)H oxidase and NAD(P)H quinone oxidoreductase, helping to neutralize harmful reactive oxygen species (ROS) and maintain cellular redox balance. Beta-NAD+ supports cellular antioxidant systems, contributes to overall cell health and protects against oxidative stress.

3.DNA repair and genome stability: β-Nicotinamide adenine dinucleotide participates in the DNA repair process. It is a substrate for enzymes such as poly(ADP-ribose) polymerase (PARP) and is essential for repairing DNA damage and maintaining genome stability. The availability of β-NAD+ affects DNA repair efficiency and cellular response to DNA damage.

4. Aging and age-related diseases: Decreased β-NAD+ is associated with aging and age-related diseases. Research suggests that maintaining optimal beta-NAD+ levels may help combat age-related physiological decline. β-Nicotinamide adenine dinucleotide precursors, such as β-nicotinamide mononucleotide (β-NMN) and nicotinamide riboside (NR), are being studied to replenish β-NAD+ levels and potentially mitigate age-related potential for cellular dysfunction.

5. Therapeutic applications: β-Nicotinamide adenine dinucleotide-based therapies are being explored for a variety of health conditions. For example, the use of β-NMN or NR supplements to increase β-NAD+ levels is being studied for potential

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benefits in neurodegenerative diseases, metabolic disorders, cardiovascular health, and age-related cognitive decline. These treatments are designed to support cellular health and improve overall physiological function.

Advantage:

1. Firsky (Wuhan) continues to make efforts to steadily offer clients high-quality items. We have put in place a reliable internal quality management system and are always working to increase quality, decrease deviation, and eliminate waste.
2. If you have any questions, don't hesitate to ask them; we'll get back to you within 48 hours.
3.After getting the items, if you have any questions, don't hesitate to get in touch with us. We promise to compensate you in full if we were the source of the loss.

FAQ:

How do I make a purchase?
We advise that you speak with our customer support personnel before placing an order because the market price of chemical raw materials fluctuates often
1. Please let me know which products you require and how many of each you need.
2. We will provide you with the best pricing right away, including delivery charges.
3. If the price seems reasonable to you, you can select a payment option to complete the transaction.
4. After we confirm your payment, your shipment will be wrapped and dispatched within 24 hours.
5. Two days after the package is sent out, a tracking number and packing photo will be provided.
6. We wish you a wonderful shopping experience and encourage you to get in touch with us if there are any problems.

Which delivery alternatives are available?
All Fushikai orders are shipped from Japan using FEDEX, UPS, DHL, Airmail, Surface Mail, EMS (Japan Post), and Economical Air (SAL). Depending on the various nations, we will select the best choice. Once payment has been received, the approximate delivery time is 5-7 working days.

How are your products verified?
We use our own quality control team to inspect each batch of products. Only at least 98% of pharmaceutical raw materials are used in the synthesis process, rather than cheap sources that are replicated using discarded chemical ingredients. Multiple tests are conducted using cutting-edge equipment to ensure perfect accuracy in determining the potency, purity and quality of ingredients and finished products.

Does a discount apply to large orders?
After your order reaches a particular value, there is a large discount. Several seasonal sales and promotions are available from us.
What forms of payment do you accept?
We accept payments with Western Union, Bitcoin, e-transfers, bank transfers, MoneyGram, and Alipay in addition to all other forms of cryptocurrency.

Do you deliver to parcel lockers at PO boxes?
YES, we could deliver to parcel lockers at PO boxes!
Can I get a tracking number from you?
We will provide you the tracking number and some images of the items you ordered as soon as the shipment is planned. For the most up-to-date tracking updates, please go to our preferred site.

FIRSKY® **Firsky International Trade (Wuhan) Co., Ltd**

+86 15387054039 admin@firsky-cn.com firskytech.com

No. 7, Xujiadai, Xin'andu Office, East-West Lake District, Wuhan, China