

## Coenzyme Beta Nad+, oxidized Form Free Acid

**Catalog No.** CSI20348A **Quantity:** 5 g  
 CSI20348B 10 g

**Alternate Names:** Coenzyme-I, free acid, B-DPN

**Description:** Nicotinamide adenine dinucleotide, abbreviated NAD<sup>+</sup>, is a coenzyme found in all living cells. The compound is a dinucleotide, since it consists of two nucleotides joined through their phosphate groups: with one nucleotide containing an adenine base, and the other containing nicotinamide.

The enzymes that make and use NAD<sup>+</sup> and NADH are important in both current pharmacology and the research into future treatments for disease. Drug design and drug development exploits NAD<sup>+</sup> in three ways: as a direct target of drugs, by designing enzyme inhibitors or activators based on its structure that change the activity of NAD-dependent enzymes, and by trying to inhibit NAD<sup>+</sup> biosynthesis.

The coenzyme NAD<sup>+</sup> is not itself currently used as a treatment for any disease. However, it is potentially useful in the therapy of neurodegenerative diseases such as Alzheimer's and Parkinson disease

**UV Spectral Analysis:** Ratios at pH 7.5  
 A250/A260 (0.83 ± 0.03)  
 A280/A260 (0.21 + or - 0.02)  
 □ at 260 nm (18.0 + or - 0.5) x 103  
 Ratios at pH 10 after reduction with ADH\*  
 A340/A260 (0.43 + or - 0.01)  
 □ at 340 nm (6.3 + or - 0.2) x 10000

**Source:** Yeast

**Formula Weight:** 663.43

**Formulation:** C21H27N7O14P2

**Purity:** 96%

**CAS No:** 53-84-9

**Storage & Stability:** -20°C

NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.