

β-Nicotinamide adenine dinucleotide phosphate, reduced tetra(cyclohexylammonium) salt

Cat. No. COEC-079

Lot. No. (See product label)

Introduction

Description

β-Nicotinamide adenine dinucleotide 2'-phosphate (NADP⁺) and β-Nicotinamide adenine dinucleotide 2'-phosphate, reduced (NADPH) comprise a coenzyme redox pair (NADP⁺:NADPH) that work together in a wide range of enzyme catalyzed oxidation reduction reactions. One of the pairs actions is that it facilitates electron transfer in anabolic reactions such as lipid and cholesterol biosynthesis and fatty acyl chain elongation. The NADP⁺/NADPH redox pair is also used in a variety of antioxidation mechanisms where it protects against reactive oxidation species accumulation. NADPH is generated in vivo by the pentose phosphate pathway (PPP).

Applications

An electron donor and a cofactor for nitric oxide synthetase

Synonyms

β-NADPH; NADPH; TPNH

Product Information

Appearance

Powder

Form

Solid

CAS No.

100929-71-3

Molecular Formula

C₂₁H₃₀N₇O₁₇P₃•4C₆H₁₃N

Molecular Weight

1142.12

Purity

≥95%

Refractive Index

1.64 (Predicted)

Density

1.64 g/cm³