

β-Nicotinamide-Adenine Dinucleotide Phosphate, Oxidized Form (β-NADP-K)

Cat. No. NATE-0788

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) involved in a wide range of enzyme catalyzed oxidation reduction reactions. The NADP⁺/NADPH redox pair facilitates electron transfer in anabolic reactions such as lipid and cholesterol biosynthesis and fatty acyl chain elongation. The NADP⁺/NADPH redox pair is used in a variety of antioxidation mechanism where it protects against reactive oxidation species accumulation. NADPH is generated in vivo by the pentose phosphate pathway (PPP).

Synonyms

β-Nicotinamide-Adenine Dinucleotide Phosphate, Oxidized Form (β-NADP-K); β-Nicotinamide-Adenine Dinucleotide Phosphate; β-NADP-K

Product Information

CAS No. 698999-85-8

Molecular Weight 781.5

Purity Determined by increase in absorbance at 340nm on enzymatic reduction with G6PDH* at pH 10 (More than 95%) *G6PDH = Glucose-6-phosphate dehydrogenase (yeast) (EC 1.1.1.49.)

Structure C21H27N7O17P3.K

Specificity Water content: < 8% by Karl Fischer

Storage and Shipping Information

Storage Keep tightly stoppered in the dark below 5°C. Moisture will reduce the purity. For prolonged storage, keep below -20°C.