

## 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** C<sub>21</sub>H<sub>27</sub>N<sub>7</sub>O<sub>17</sub>P<sub>3</sub>.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.