

Reduced NADH

(β -Nicotinamide adenine dinucleotide- Reducing agent used in Biochemical Assay)

Product Number: 1051

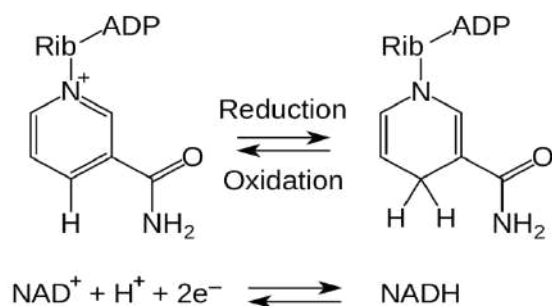
CAS Number: [606-68-8]

Storage Condition: Keep well closed at -20°C in a dark and dry place.

Description

NADH is a reducing agent used for biochemical assays. Functions as a coenzyme for many oxidoreductases. NADH reagents are utilised in enzyme cycling assays to boost the detection of activity of biologically relevant enzymes or metabolites present in low concentrations.

Structural Formula Reduced NADH



Specification

White to slight yellowish powder, soluble, Purity 95%

Molecular weight: 709.4g/mol

Molecular formula $\text{C}_{21}\text{H}_{27}\text{N}_7\text{Na}_2\text{O}_{14}\text{P}_2$ (Hill Notation)

In metabolism, Nicotinamide Adenine Dinucleotide (NAD) is involved in redox reactions, carrying electrons from one reaction to another. It is found in two forms in cells, as an oxidizing agent NAD^+ and as a reducing agent NADH. The oxidizing agent NAD^+ accepts electrons from other molecules and becomes reduced, creating NADH, which can then be used as a reducing agent to donate electrons. It is a substrate for the poly (ADP-ribose) polymerases (PARPs) nuclear DNA damage sensors during the recognition and repair of single-strand DNA breaks.

Application

NADH is a facilitator of numerous biological reactions. It works as a regenerating electron donor in catabolic processes including glycolysis, β -oxidation, and the citric acid cycle (also known as the Krebs cycle or TCA cycle). NADH also takes part in cell signaling events. In R&D, NADH reagents can help increase the detection of enzyme targets for drug discovery or metabolites in enzyme cycling assays.

Quality

For laboratory use only.

Offering Sizes

Available in 1g, 5g, and 25g per packaging