

## DNA ligase (NAD<sup>+</sup>)

Cat. No. EXWM-5821

Lot. No. (See product label)

### Introduction

#### Description

Catalyses the formation of a phosphodiester at the site of a single-strand break in duplex DNA. RNA can also act as substrate, to some extent. cf. EC 6.5.1.1, DNA ligase (ATP), EC 6.5.1.6, DNA ligase (ATP or NAD<sup>+</sup>), and EC 6.5.1.7, DNA ligase (ATP, ADP or GTP).

#### Synonyms

polydeoxyribonucleotide synthase (NAD<sup>+</sup>); polynucleotide ligase (NAD<sup>+</sup>); DNA repair enzyme (ambiguous); DNA joinase (ambiguous); polynucleotide synthetase (nicotinamide adenine dinucleotide); deoxyribonucleic-joining enzyme (ambiguous); deoxyribonucleic ligase (ambiguous); deoxyribonucleic repair enzyme (ambiguous); deoxyribonucleic joinase (ambiguous); DNA ligase (ambiguous); deoxyribonucleate ligase (ambiguous); polynucleotide ligase (ambiguous); deoxyribonucleic acid ligase (ambiguous); polynucleotide synthetase (ambiguous); deoxyribonucleic acid joinase (ambiguous); DNA-joining enzyme (ambiguous); polynucleotide ligase (nicotinamide adenine dinucleotide)

### Product Information

#### Form

Liquid or lyophilized powder

#### EC Number

EC 6.5.1.2

#### CAS No.

37259-52-2

#### Reaction

$\text{NAD}^+ + (\text{deoxyribonucleotide})_n + (\text{deoxyribonucleotide})_m = \text{AMP} + \beta\text{-nicotinamide D-nucleotide} + (\text{deoxyribonucleotide})_{n+m}$

#### Notes

This item requires custom production and lead time is between 5-9 weeks. We can custom produce according to your specifications.

### Storage and Shipping Information

#### Storage

Store it at +4 °C for short term. For long term storage, store it at -20 °C~-80 °C.