

## Product Information

### NADP

**Cat. No.:** X25-06-LY846

**Size:** 50 mg; 100 mg; 250 mg; 500 mg; 1 g; 5 g

**CAS Number:** 53-59-8

**Compound CID:** 5885

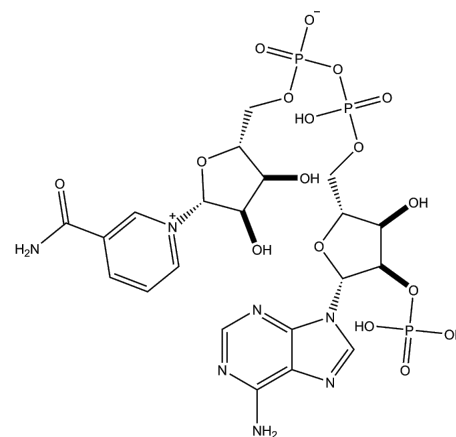
**Synonym:** 53-59-8;

[[*(2R,3R,4R,5R*

)-5-(6-Aminopurin-9-yl)-3-hydroxy-4-phosphonooxyoxolan-2-yl]methoxyhydroxyphosphoryl]

[(*2R,3S,4R,5R*)-5-(3-Carbamoylpyridin-1-ium-1-yl)-3,4-dihydroxyoxolan-2-yl]methyl phosphate; Codehydrase II; Nadide phosphate; Adenine-nicotinamide dinucleotide phosphate

**This product is for research use only and is not intended for diagnostic use.**



### Product Information

<b>Description</b>	NADP is composed of two nucleotides, one is adenosine (A) and the other is nicotinamide (N), which are linked by a phosphate group.
<b>Molecular Weight</b>	743.41
<b>Molecular Formula</b>	C <sub>21</sub> H <sub>28</sub> N <sub>7</sub> O <sub>17</sub> P <sub>3</sub>
<b>IUPAC Name</b>	[[ <i>(2R,3R,4R,5R</i> )-5-(6-Aminopurin-9-yl)-3-hydroxy-4-phosphonooxyoxolan-2-yl]methoxyhydroxyphosphoryl] [[ <i>(2R,3S,4R,5R</i> )-5-(3-carbamoylpyridin-1-ium-1-yl)-3,4-dihydroxyoxolan-2-yl]methyl phosphate
<b>InChI</b>	InChI=1S/C21H28N7O17P3/c22-17-12-19(25-7-24-17)28(8-26-12)21-16(44-46(33,34)35)14(30)11(43-21)6-41-48(38,39)45-47(36,37)40-5-10-13(29)15(31)20(42-10)27-3-1-2-9(4-27)18(23)32/h1-4,7-8,10-11,13-16,20-21,29-31H,5-6H2,(H7-,22,23,24,25,32,33,34,35,36,37,38,39)/t10-,11-,13-,14-,15-,16-,20-,21-/m1/s1
<b>InChI Key</b>	XJLXINKUBYWONI-NNYOXOHSSA-N
<b>SMILES string</b>	C1=CC(=C[N+](=C1)[C@H]2[C@@H]([C@@H]([C@H](O2)COP(=O)([O-])OP(=O)(O)OC[C@@H]3[C@H]([C@H]([C@@H]([O3]N4C=NC5=C(N=CN=C54)N)OP(=O)(O)O)O)O)C(=O)N
<b>Form</b>	Solid
<b>Purity</b>	≥98.0%, determined by HPLC.
<b>Solubility</b>	Water: 125 mg/mL (168.14 mM); DMSO: < 1 mg/mL (insoluble or slightly soluble)



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<b>Identity</b>	Confirmed by NMR and MS.
<b>Quality Level</b>	Research grade
<b>Applications</b>	NADP is mainly used for the analysis of enzyme reactions and the study of metabolic pathways, especially in biosynthesis and reductive metabolism.
<b>Storage</b>	Store at 4°C.

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