

Product Information

NADPH tetrasodium salt

Cat. No.: X25-06-LY845

Size: 50 mg; 100 mg; 250 mg; 500 mg

CAS Number: 2646-71-1

Compound CID: 5884

Synonym: 2646-71-1;

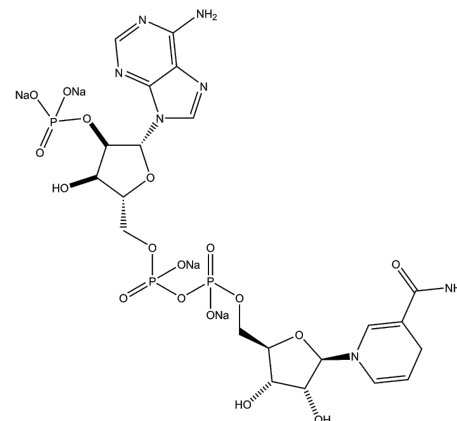
[[[(2*R*,3*R*,4*R*,5*R*

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

[(2*R*,3*S*,4*R*,5*R*)-5-(3-Carbamoyl-4*H*-pyridin-1-yl)-3,4-dihydroxyoxolan-2-yl]methyl

hydrogen phosphate; Dihydronicotinamide-adenine dinucleotide phosphate

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



Product Information

Description	NADPH tetrasodium salt is the tetrasodium salt form of NADPH and participates in various biochemical reactions, especially reduction reactions.
Molecular Weight	833.35
Molecular Formula	C ₂₁ H ₂₆ N ₇ Na ₄ O ₁₇ P ₃
IUPAC Name	[[[(2 <i>R</i> ,3 <i>R</i> ,4 <i>R</i> ,5 <i>R</i>)-5-(6-Aminopurin-9-yl)-3-hydroxy-4-phosphonooxyoxolan-2-yl]methoxy-hydroxyphosphoryl] [(2 <i>R</i> ,3 <i>S</i> ,4 <i>R</i> ,5 <i>R</i>)-5-(3-carbamoyl-4 <i>H</i> -pyridin-1-yl)-3,4-dihydroxyoxolan-2-yl]methyl hydrogen phosphate
InChI	InChI=1S/C21H26N7O17P3/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/h1,3-4,7-8,10-11,13-16,20-21,29-31H,2,5-6H2,(H2,23,32)(H,36,37)(H,38,39)(H2,22,24,25)(H2,33,34,35)/t10-,11-,13-,14-,15-,16-,20-,21-/m1/s1
InChI Key	ACFIXJIJDZMPPO-NNYOXOHSSA-N
SMILES string	C1C=CN(C=C1C(=O)N)[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
Form	Solid
Purity	≥98.0%, determined by HPLC.
Solubility	Water: 83.33 mg/mL (99.99 mM); DMSO: < 1 mg/mL (insoluble or slightly soluble)
Identity	Confirmed by NMR and MS.



Quality Level	Research grade
Applications	NADPH tetrasodium saltis used to study the sources of reducing power and energy transfer processes, such as in metabolic pathways.
Storage	Store at -20°C.
