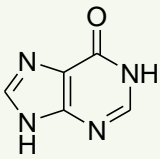
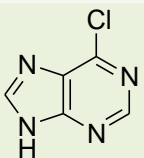
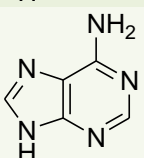
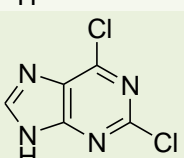
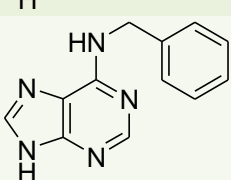
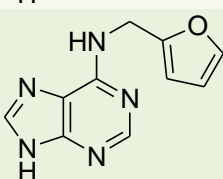
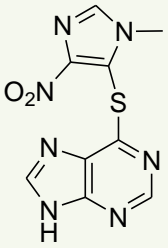
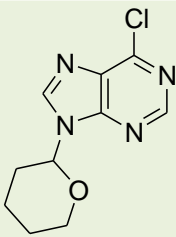
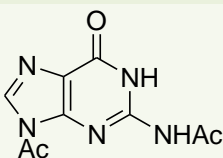
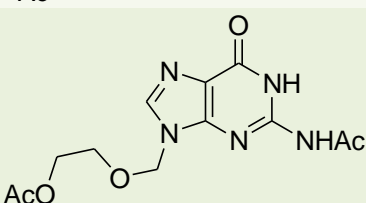


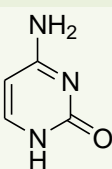
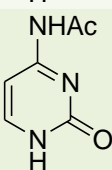
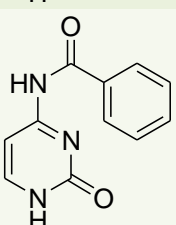
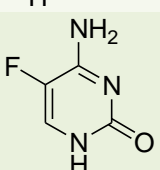
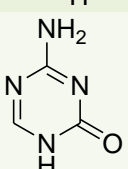
Nucleoside (acid) and its derivatives

Nucleoside (acid) and its derivatives have a very broad application prospect in medicine, health products, food processing industry, plant growth, and prevention of diseases and insect pests, and have been highly valued by many developed countries. Noticeably, with the development of gene therapy (e.g., siRNA, mRNA, plasmids, aptamers), different functionalized polynucleotides will be discovered gradually and make a great benefit to the health of humankind. Besides, regarding the trend of social aging, nucleic acid health products with anti-aging effects will be more remarkable.

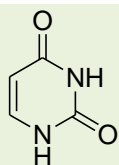
On the basis, there are three technologies to build nucleoside (acid) products, i.e. the high efficient catalytic synthesis technology, the nucleoside fermentation technology, and biotransformation semi-synthesis technology. The products include pyrimidine series, purine series, nucleotide series, nucleoside series, such as citicoline sodium, ribavirin, inosine, acyclovir, cytosine, 5-fluorocytosine, cytidine, and other raw materials and pharmaceutical intermediates. The pharmaceutical APIs cover the fields of antiviral, antineoplastic, and nervous system drugs. The detailed products with different certain certificates of chemicals and pharmaceuticals (e.g., ISO9001, GMP, DMF, REACH) or nutrition (e.g., HALAL, KOSHER) are shown below, which can be supported by ASCHEM (www.aschem.ch).

Products	Chemical Structure	CAS No.	Purity & others
Purine			
Hypoxanthine		68-94-0	≥98%
6-Chloropurine		87-42-3	
Adenine		73-24-5	≥ 99.0% (USP)
2,6-Dichloropurine		5451-40-1	
6-Benzylaminopurine		1214-39-7	
6-Furfurylaminopurine		525-79-1	

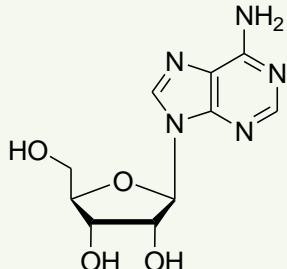
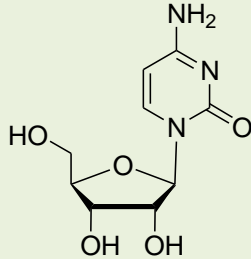
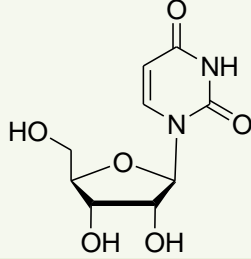
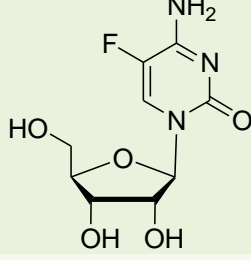
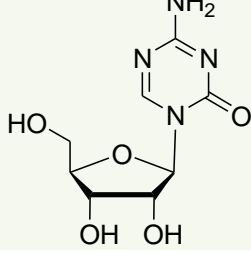
Azathioprine		446-86-6
6-Chloropurine THP		7306-68-5
N,9-Diacetylguanine		3056-33-5
Dicacetyl-Aciclovir		75123-73-3

Products	Chemical Structure	CAS No.	Purity & others
Pyrimidine			
Cytosine		71-30-7	≥ 99.0%
N⁴-Acetylcytosine		14631-20-0	≥ 99.0%
N⁴-Benzoylcytosine		26661-13-2	≥ 99.0%
5-Fluorocytosine		2022-85-7	≥ 99.0%
5-Azacytosine		931-86-2	

Uracil



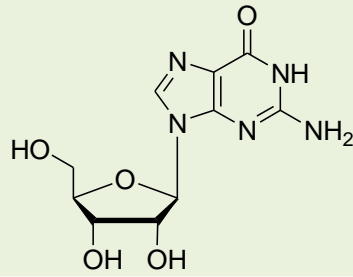
66-22-8

Products	Chemical Structure	CAS No.	Purity & others
Nucleoside Adenosine	 <p>The chemical structure of Adenosine consists of a ribose sugar ring with hydroxyl groups at the 2' and 3' positions, and an adenine base attached to the 1' carbon.</p>	58-61-7	
Cytidine	 <p>The chemical structure of Cytidine consists of a ribose sugar ring with hydroxyl groups at the 2' and 3' positions, and a cytosine base attached to the 1' carbon.</p>	65-46-3	≥99.0%
Uridine	 <p>The chemical structure of Uridine consists of a ribose sugar ring with hydroxyl groups at the 2' and 3' positions, and a uracil base attached to the 1' carbon.</p>	58-96-8	≥99.0%
5-Fluorocytidine	 <p>The chemical structure of 5-Fluorocytidine consists of a ribose sugar ring with hydroxyl groups at the 2' and 3' positions, and a 5-fluorocytosine base attached to the 1' carbon.</p>	2341-22-2	
5-Azacytidine	 <p>The chemical structure of 5-Azacytidine consists of a ribose sugar ring with hydroxyl groups at the 2' and 3' positions, and a 5-azacytosine base attached to the 1' carbon.</p>	320-67-2	

Guanosine

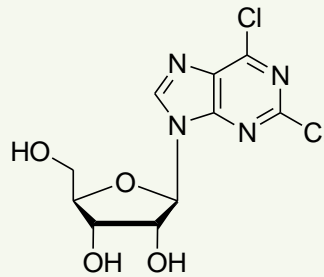
118-00-3

≥98.0%



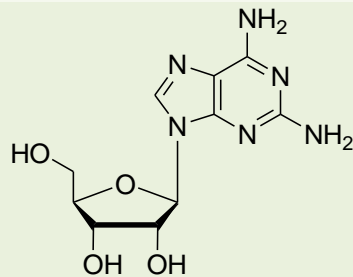
**2,6-Dichloropurine
Ribose**

13276-52-3



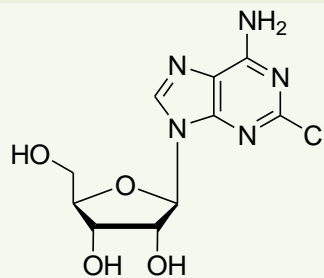
2-Aminoadenosine

2096-10-8



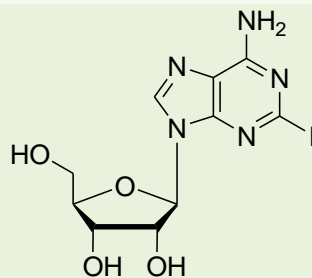
2-Chloroadenosine

146-77-0



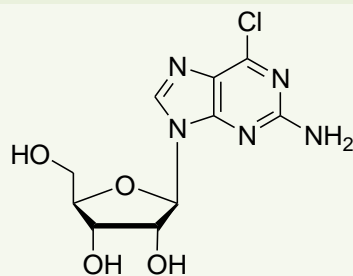
2-Iodoadenosine

35109-88-7



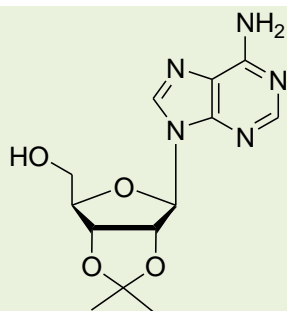
6-Chloroguanosine

2004-07-1



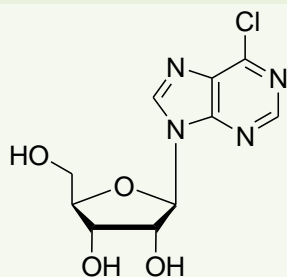
**2',3'-O-Isopropylidene
adenosine**

362-75-4



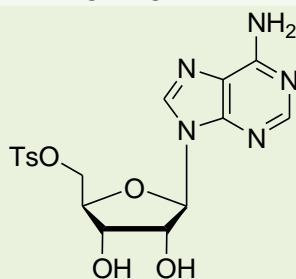
**6-Chloropurine
Riboside**

2004-06-0



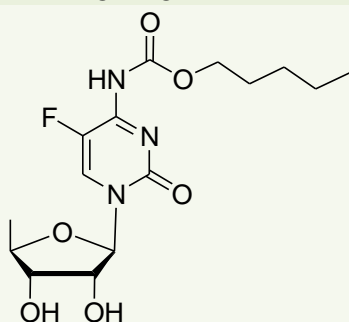
5'-Tosyladenosine

5135-30-8



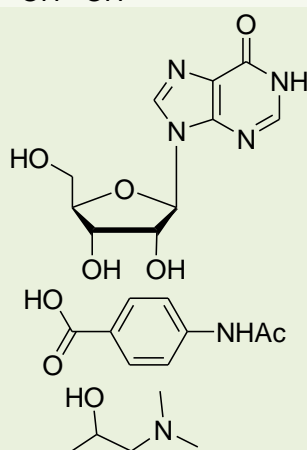
Capecitabine

154361-50-9

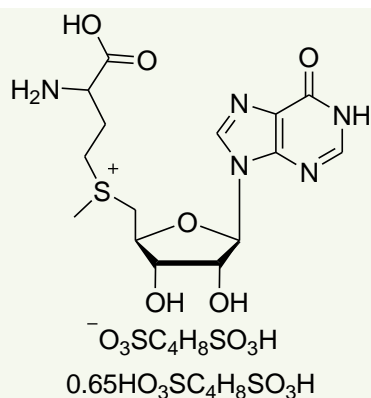


Isoprinosine

36703-88-5



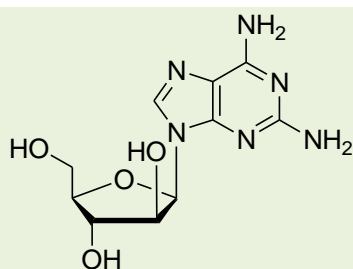
**S-Adenosylmethionine
1,4-butanedisulfonate**



101020-79-5

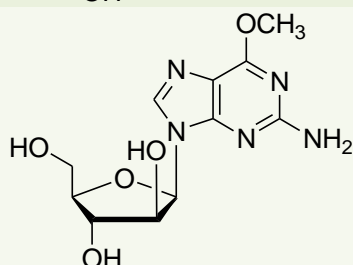
Products	Chemical Structure	CAS No.	Purity&others
Arabinosyl nucleosides			
Arabinoadenosine		5536-17-4	
Arabinoguanosine		38819-10-2	
Arabinofuranosyluracil		3083-77-0	
Arabinofuranosylcytosine		147-94-4	
Fludarabine		21679-14-1	≥99%

**2,6-Amino-
arabinoadenosine**



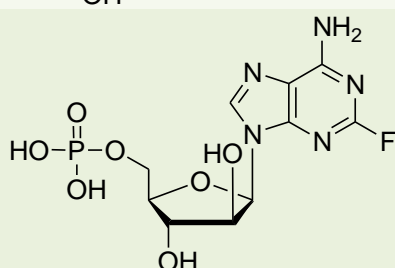
34079-68-0

Nelarabine



121032-29-
9

Fludarabine phosphate



75607-67-9

Products

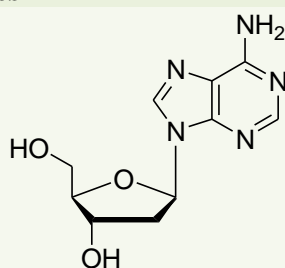
Chemical Structure

CAS No.

Purity & others

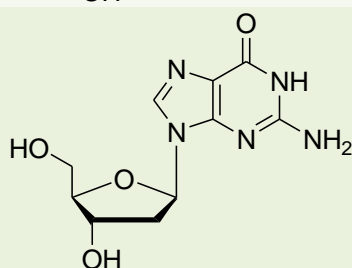
2' (or and 3')-Deoxy nucleosides

2'-Deoxyadenosine



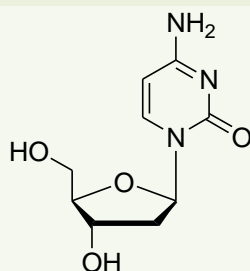
958-09-8

**2'-Deoxyguanosine
monohydrate**

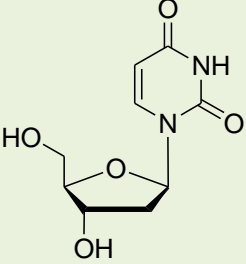
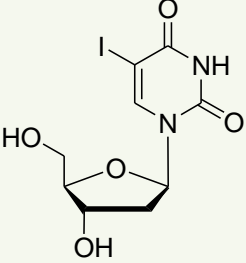
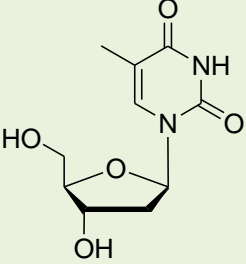
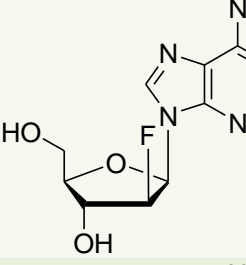
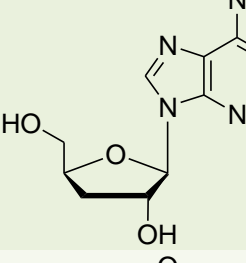
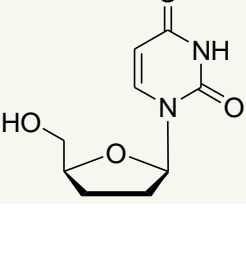


961-07-9

2'-Deoxycytidine

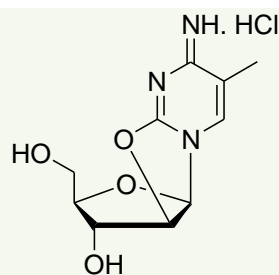


951-77-9

2'-Deoxyuridine		951-78-0
5-Iodo-2'-Deoxyuridine		54-42-2
5-methyl-2'-Deoxycytidine		838-07-3
Clofarabine		123318-82-1
3'-Deoxyadenosine (cordycepin)		73-03-0
2,3'-Dideoxyuridine		5983-09-5

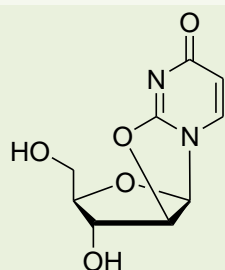
Products	Chemical Structure	CAS No.	Purity & others
Cyclo-nucleosides			

CMC·HCl



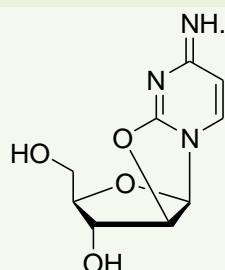
51391-96-9

2,2'-O-Cyclouridine



3736-77-4

Cyclocytidine hydrochloride

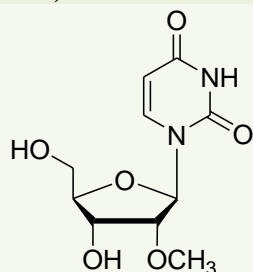


10212-25-6

Products	Chemical Structure	CAS No.	Purity & others
----------	--------------------	---------	-----------------

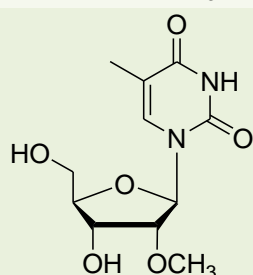
2'-Methoxy(or 2'- Fluoro) nucleosides

2'-Methoxy uridine



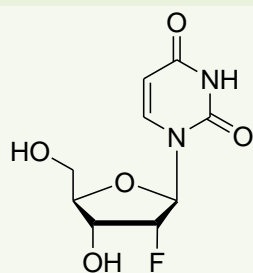
2140-76-3

5-Methyl-2'-Methoxy uridine



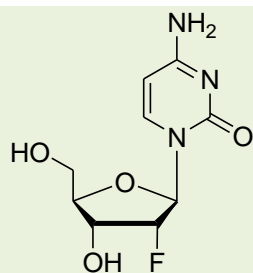
55486-09-4

2'-Deoxy-2'-Fluorouridine

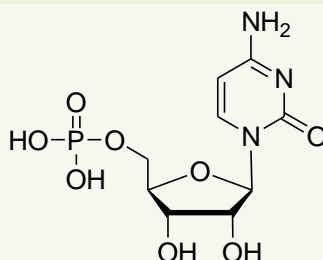
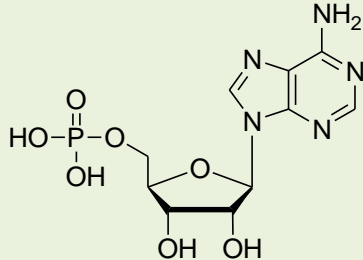
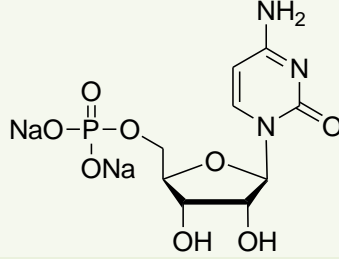
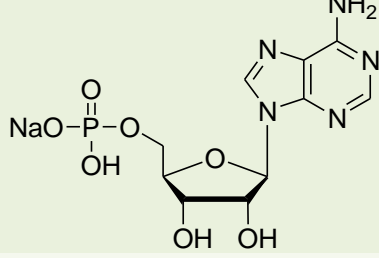
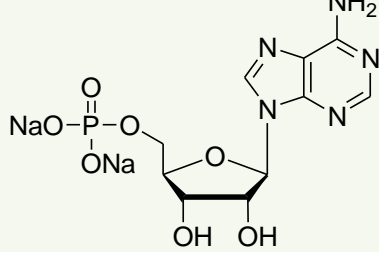


784-71-4

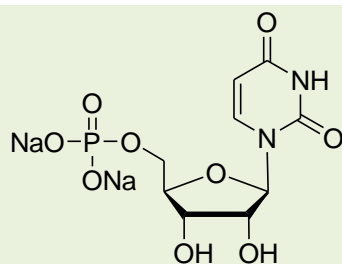
**2'-Deoxy-2'-
Fluorocytidine**



10212-20-1

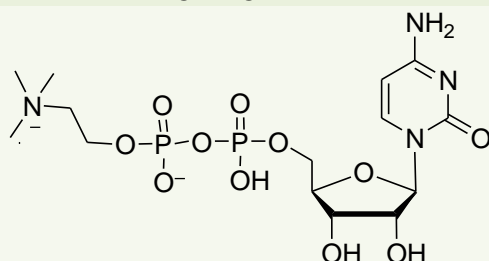
Products	Chemical Structure	CAS No.	Purity&others
Nucleotides			
Cytidine-5' monophosphate, free acid	 <p>The chemical structure shows a cytosine base attached to a ribose sugar. The cytosine base has an amino group (NH₂) at the 4-position and a carbonyl group (C=O) at the 2-position. The sugar is a five-membered ring with hydroxyl groups (OH) at the 2' and 3' positions. The cytosine base is attached to the 1' carbon of the sugar. A phosphate group (HO-P(=O)(OH)-O-) is attached to the 5' carbon of the sugar.</p>	63-37-6	
Adenosine5'- monophosphate,free acid	 <p>The chemical structure shows an adenine base attached to a ribose sugar. The adenine base has an amino group (NH₂) at the 6-position. The sugar is a five-membered ring with hydroxyl groups (OH) at the 2' and 3' positions. The adenine base is attached to the 1' carbon of the sugar. A phosphate group (HO-P(=O)(OH)-O-) is attached to the 5' carbon of the sugar.</p>	61-19-8	≥98.0%
Cytidine-5'- monophosphate Disodium Salt	 <p>The chemical structure shows a cytosine base attached to a ribose sugar. The cytosine base has an amino group (NH₂) at the 4-position and a carbonyl group (C=O) at the 2-position. The sugar is a five-membered ring with hydroxyl groups (OH) at the 2' and 3' positions. The cytosine base is attached to the 1' carbon of the sugar. A phosphate group (NaO-P(=O)(OH)-ONa) is attached to the 5' carbon of the sugar.</p>	229-819-3	
Adenosine5'- monophosphate Sodium Salt	 <p>The chemical structure shows an adenine base attached to a ribose sugar. The adenine base has an amino group (NH₂) at the 6-position. The sugar is a five-membered ring with hydroxyl groups (OH) at the 2' and 3' positions. The adenine base is attached to the 1' carbon of the sugar. A phosphate group (NaO-P(=O)(OH)-O-) is attached to the 5' carbon of the sugar.</p>	13474-03-8	≥98.0%
Adenosine5'- monophosphate Disodium Salt	 <p>The chemical structure shows an adenine base attached to a ribose sugar. The adenine base has an amino group (NH₂) at the 6-position. The sugar is a five-membered ring with hydroxyl groups (OH) at the 2' and 3' positions. The adenine base is attached to the 1' carbon of the sugar. A phosphate group (NaO-P(=O)(OH)-ONa) is attached to the 5' carbon of the sugar.</p>	4578-31-8	≥98.0%

**Uridine-5'-
monophosphate
Disodium Salt**



3387-36-8

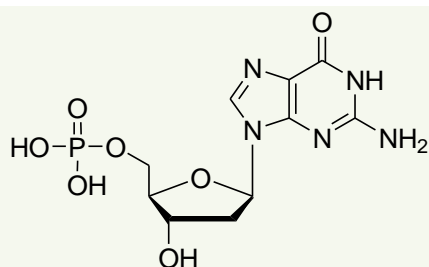
Citicoline



987-78-0

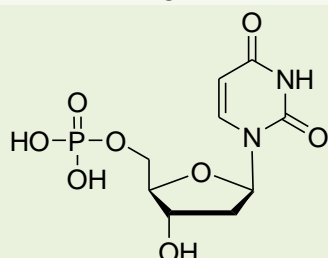
Products	Chemical structure	CAS No.	Purity & others
2'-Deoxy Nucleotides			
2'-Deoxyguanosine 5'-monophosphate disodium salt	<p>The structure shows a guanine base attached to a deoxyribose sugar at the C5 position. The C5' carbon of the deoxyribose is linked to a phosphate group, which is further bonded to a sodium ion (Na+). The C2' carbon of the deoxyribose has a hydroxyl group (OH).</p>	33430-61-4	
2'-Deoxyadenosine -5'- monophosphate Disodium salt	<p>The structure shows an adenine base attached to a deoxyribose sugar at the C5 position. The C5' carbon of the deoxyribose is linked to a phosphate group, which is further bonded to a sodium ion (Na+). The C2' carbon of the deoxyribose has a hydroxyl group (OH).</p>	2922-74-9	
2'-Deoxyuridine- 5'-monophosphate Disodium salt	<p>The structure shows a uracil base attached to a deoxyribose sugar at the C5 position. The C5' carbon of the deoxyribose is linked to a phosphate group, which is further bonded to a sodium ion (Na+). The C2' carbon of the deoxyribose has a hydroxyl group (OH).</p>	42155-08-8	
2'-Deoxycytidine- 5'-monophosphate Disodium salt	<p>The structure shows a cytosine base attached to a deoxyribose sugar at the C5 position. The C5' carbon of the deoxyribose is linked to a phosphate group, which is further bonded to a sodium ion (Na+). The C2' carbon of the deoxyribose has a hydroxyl group (OH).</p>	13085-50-2	

**2'-
Deoxyguanosine-
5'-Phosphate Free
acid**



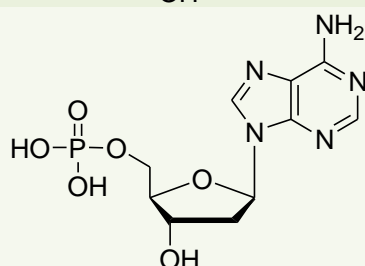
902-04-5

**2'-Deoxyuridine-
5'-monophosphate
Free acid**



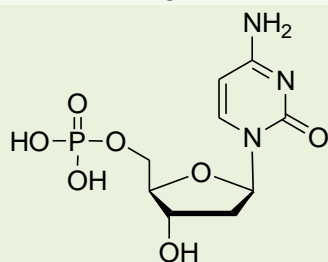
964-26-1

**2'-
Deoxyadenosine-
5'-monophosphate
Free acid**



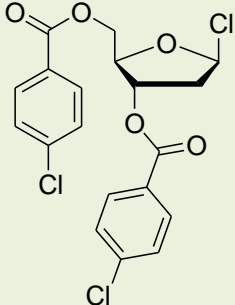
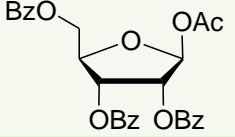
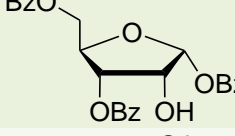
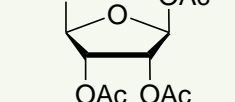
653-63-4

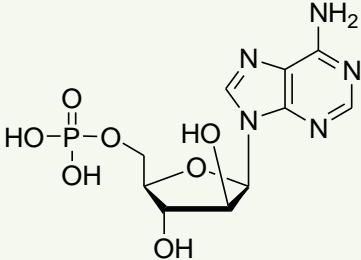
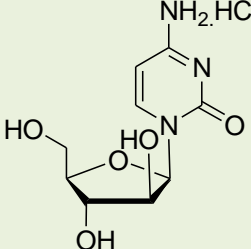
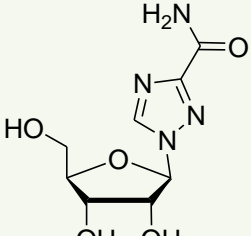
**2'-Deoxycytidine-
5'-monophosphate
Free acid**



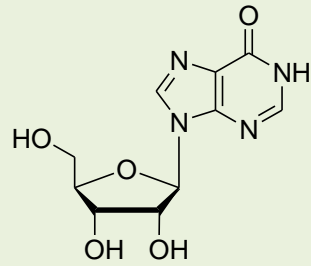
1032-65-1

Products	Chemical structure	CAS No.	Purity & others
Sugar (furanose)			
D-ribose		58-61-7	
Tetraacetylribofuranose		13035-61-5	
2-Deoxy-2-fluoro-1,3,5-tri-O-benzoyl-D-ribofuranose		97614-43-2	

1-Chloro-3,5-Di-(p-Chlorobenzoyl)-2-Deoxy-D-Ribose		3601-90-9
1-O-Acetyl-2,3,5-Tri-D-Benzoyl -β-D-Ribose		6974-32-9
1,3,5-Tri-O-benzoyl-D-ribofuranose		22224-41-5
1,2,3-Triacetyl-5-Deoxy-D-Ribose		62211-93-2

Products	Chemical Structure	CAS No.	Purity & others
API			
Vidarabine monophosphate		29984-33-6	CP
Cytarabine hydrochloride		69-74-9	CP. USP
Ribavirin		36791-04-5	CP, ≥99.0%

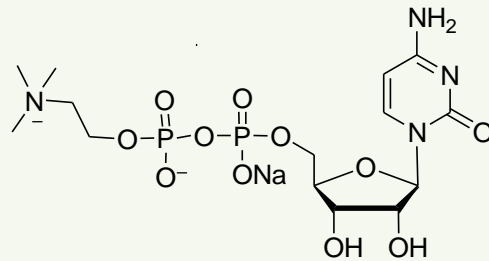
Inosine



58-63-9

GMP, CP
98.0~102.0%

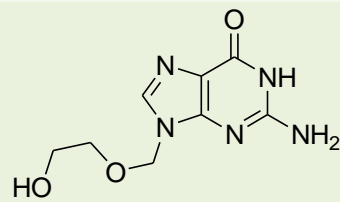
**Citicoline
Sodium**



33818-15-4

GMP, CP, IP
≥98.0%

Acyclovir



59277-89-3

GMP, CP