

LES ACIDES NUCLÉIQUES

Chapitre I - Nucléosides et Nucléotides

- I-Définition
- II-Bases puriques et pyrimidiques
- III-Oses des nucléosides et des nucléotides
- IV-Nucléosides
- V-Fonction des nucléotides

Chapitre II - Acides DesoxyriboNucléiques

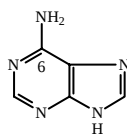
- I-Structure primaire de l'ADN
- II-Structure secondaire de l'ADN
- III-Propriétés des ADN
- IV-ADN des êtres vivants
- V-ADN mitochondrial

Chapitre III - Acides RiboNucléiques

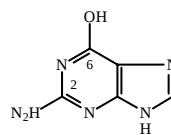
- I-Structure primaire des ARN
- II-Structure secondaire des ARN
- III-Propriétés physico-chimiques des ARN
- IV-Différentes classes d'ARN

Chapitre I - Nucléosides et Nucléotides

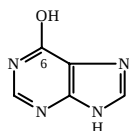
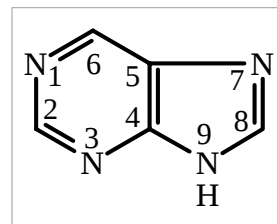
Bases puriques



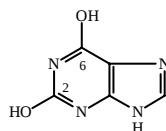
Adenine : 6amino-purine (Ade)
ADN, ARN, ATP, CoE...



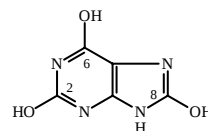
Guanine : 2amino-6hydroxy-purine (Gua)
ADN, ARN, GTP...



Hypoxanthine
6hydroxy-purine



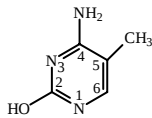
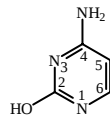
Xanthine
2-6dihydroxypurine



Ac. Urique
2-6-8trihydroxypurine

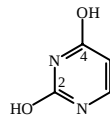
Chapitre I - Nucléosides et Nucléotides

Bases pyrimidiques

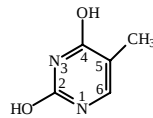


5methyl-cytosine
Méthyl CpG, 5 % des C de l'ADN

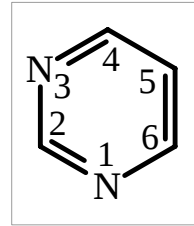
Cytosine : 2hydroxy-4amino-pyrimidine (Cyt)
ADN, ARN



Uracile : 2-4dihydroxy-pyrimidine (Ura)
ARN

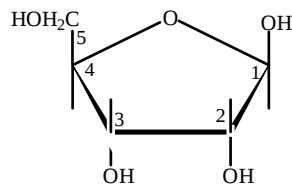


Thymine : 5methyl-uracile (Thy)
ADN

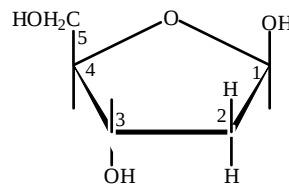


Chapitre I - Nucléosides et Nucléotides

Oses des nucléosides et nucléotides



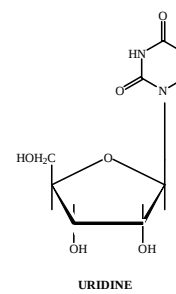
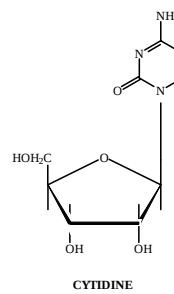
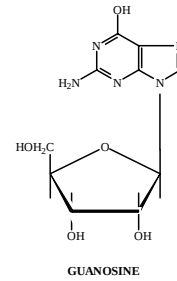
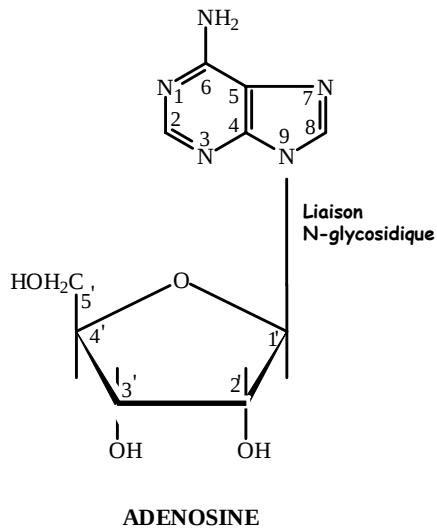
β D (-) ribofuranose



β D (-) 2deoxyribofuranose

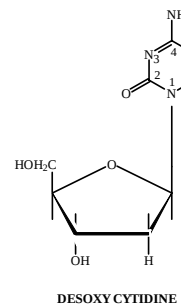
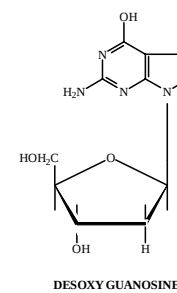
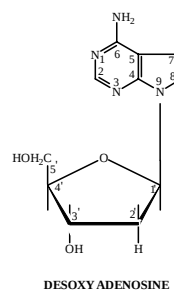
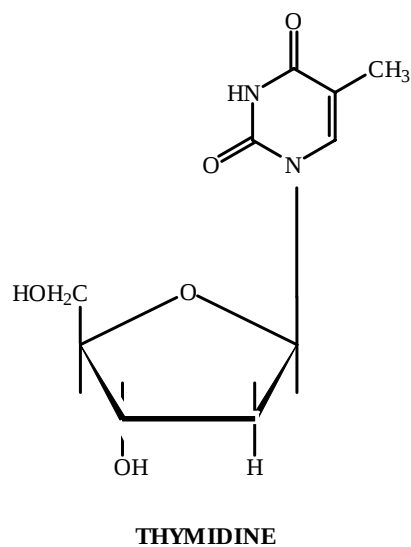
Chapitre I - Nucléosides et Nucléotides

Ribonucléosides



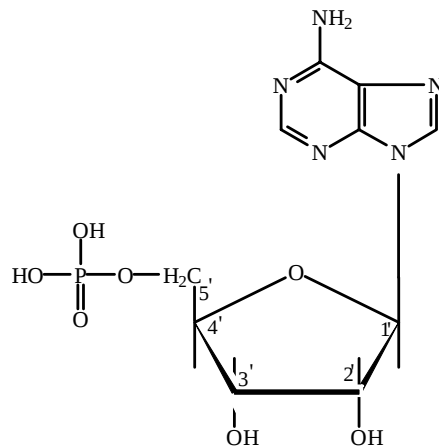
Chapitre I - Nucléosides et Nucléotides

Desoxyribonucleosides



Chapitre I - Nucléosides et Nucléotides

Nucleotides



ACIDE ADENYLIQUE

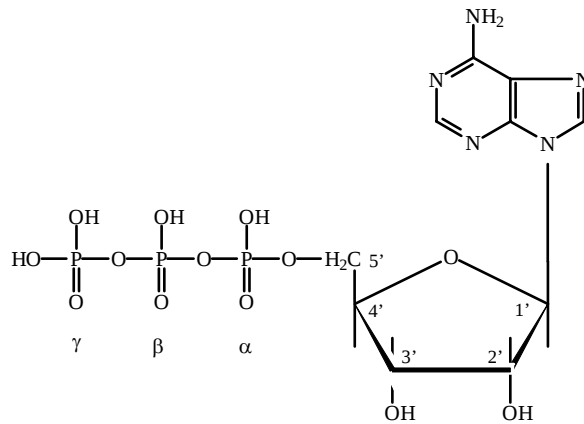
Chapitre I - Nucléosides et Nucléotides

Base	Nucléoside	Nucléotide	Ac. Nucléique
Purines			
Adenine	Adenosine	Adenylate	ARN
	Desoxyadenosine	Desoxy Adenylate	ADN
Guanine	Guanosine	Guanylate	ARN
	Desoxy guanosine	Desoxy guanylate	ADN
Pyrimidines			
Cytosine	Cytidine	Cytidylate	ARN
	Desoxycytidine	Desoxycytidylate	ADN
Uracile	Uridine	Uridylate	ARN
Thymine	Thymidine	Thymidylate	ADN

Chapitre I - Nucléosides et Nucléotides

Fonction des nucléotides

Nucléosides mono, di et triphosphates



Ex : ADENOSINE TRIPHOSPHATE (ATP)

Chapitre I - Nucléosides et Nucléotides

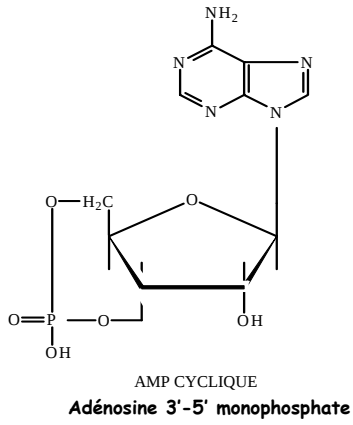
ABBREVIATIONS DES RIBONUCLEOSIDES 5' PHOSPHATE

Base	Mono	Di	Tri
ADENINE	AMP	ADP	ATP
GUANINE	GMP	GDP	GTP
CYTOSINE	CMP	CDP	CTP
URACILE	UMP	UDP	UTP

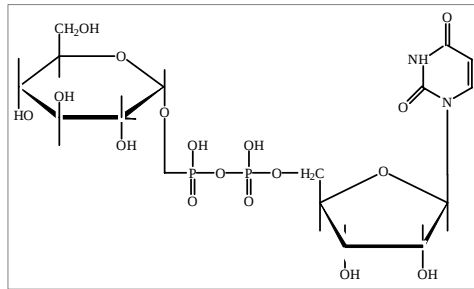
ABBREVIATIONS DES DESOXYRIBONUCLEOTIDES 5' PHOSPHATE

Base	Mono	Di	Tri
ADENINE	d AMP	d ADP	d ATP
GUANINE	d GMP	d GDP	d GTP
CYTOSINE	d CMP	d CDP	d CTP
THYMINE	d TMP	d TDP	d TTP

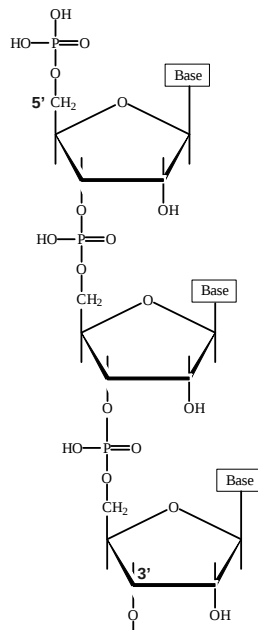
Chapitre I - Nucléosides et Nucléotides



UDP-Glc
Uridine di phosphoglucose
Forme active du glucose

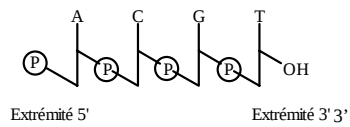


Chapitre II - LES ACIDES DESOXYRIBONUCLEIQUES



5'

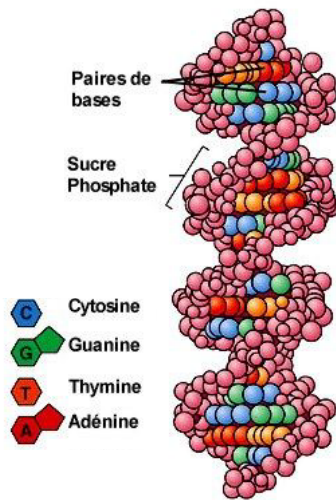
3'



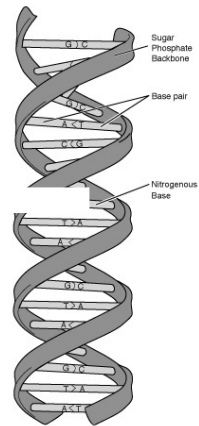
5' -----A-C-G-T-T-A-G-T-C-----3'

Chapitre II - LES ACIDES DESOXYRIBONUCLEIQUES

Double hélice



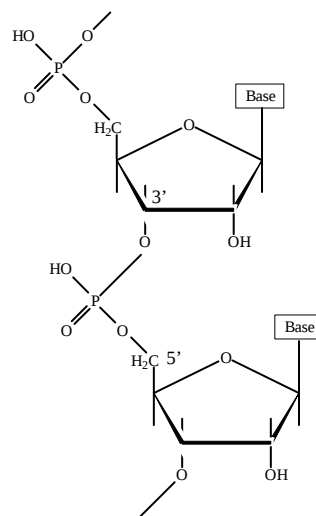
Configuration hélicoïdale : ADN-B



Chapitre III - LES ACIDES RIBONUCLEIQUES

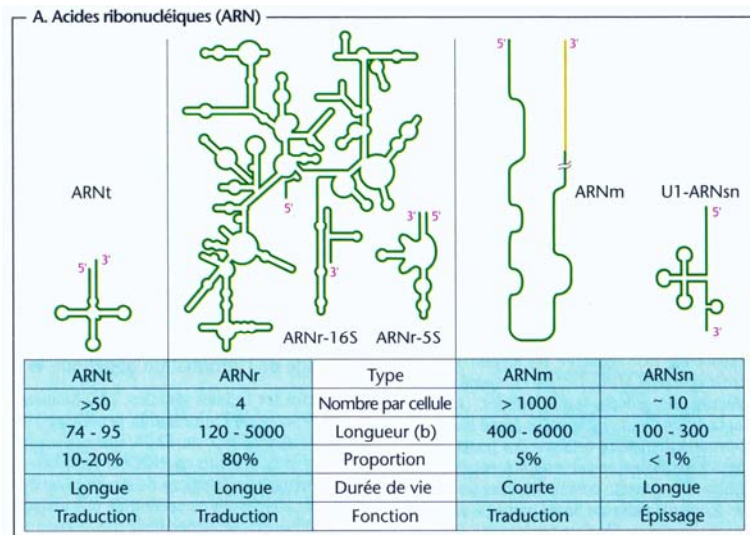
5'

3'



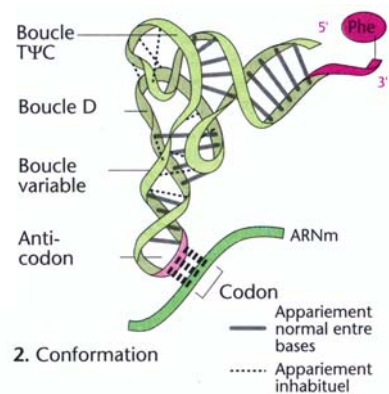
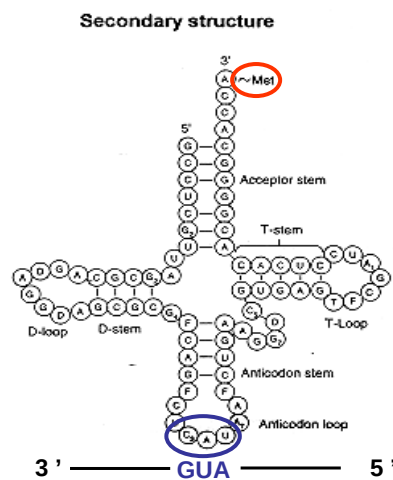
Chapitre III - LES ACIDES RIBONUCLEIQUES

Différentes classes d'ARN



Chapitre III - LES ACIDES RIBONUCLEIQUES

B- ARN de transfert (ARNt^{Phe})



Chapitre III - LES ACIDES RIBONUCLEIQUES

ARN de transfert (ARN^{tPhe})

