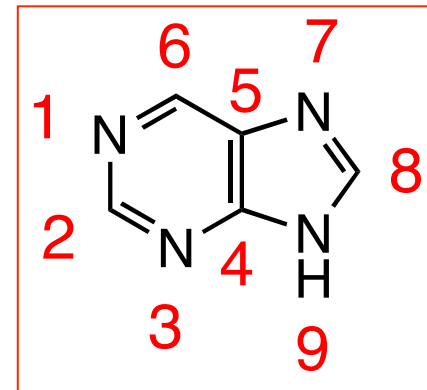
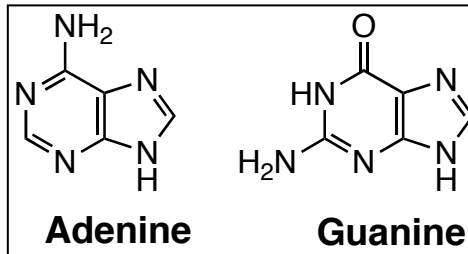


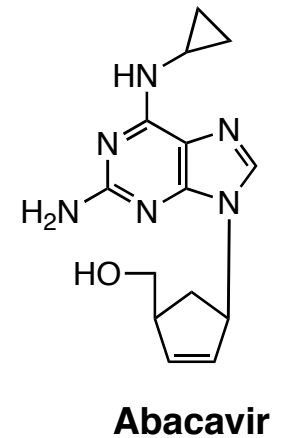
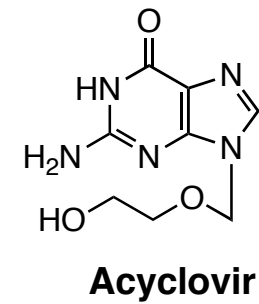
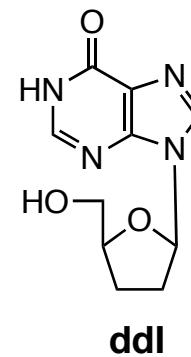
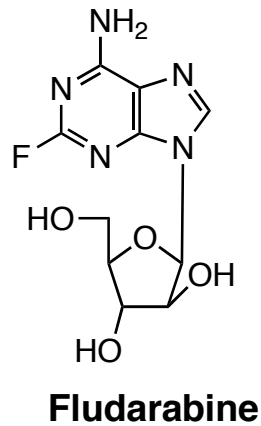
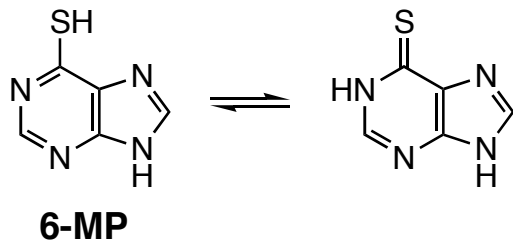
Purines Bioactives

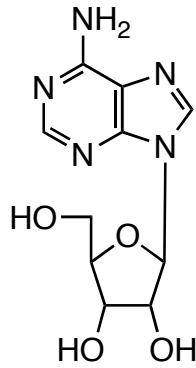
Bases ADN / ARN



Purine

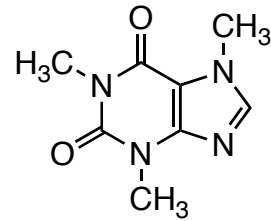
Médicaments : anticancéreux / antiviraux



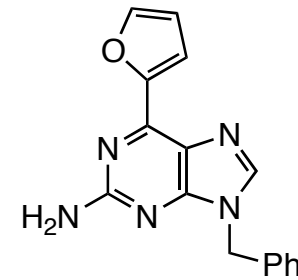


Adenosin

Libérée par les neurones
et par les cellules gliales

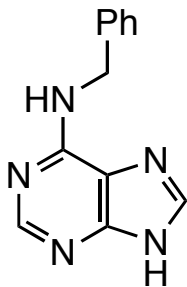


Coffein

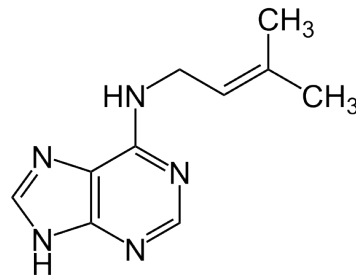


Sel. A_{2A} antag.
Parkinson / Alzheimer ?

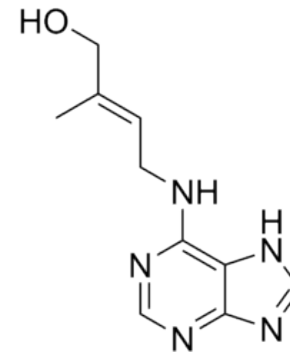
Cytokinines - hormones de croissance végétales



Benzyladénine

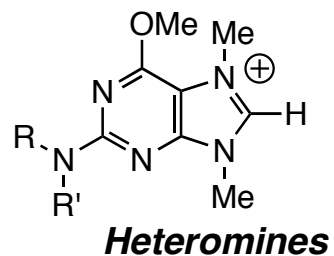


isopentényladénine



Trans - Zéatine

Produits Naturels

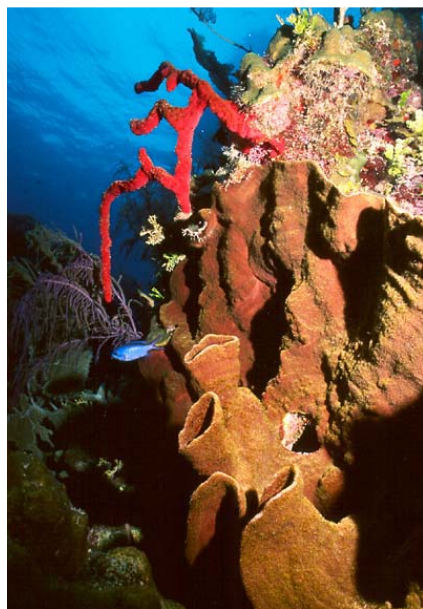


Heteromines

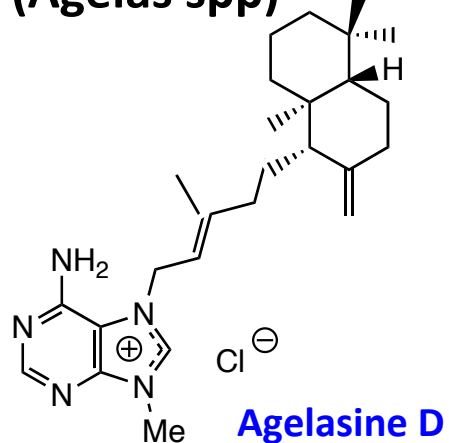
- Isolé d'*Heterostemma brownii*
- Traitement des tumeurs dans la médecine populaire taiwanaise



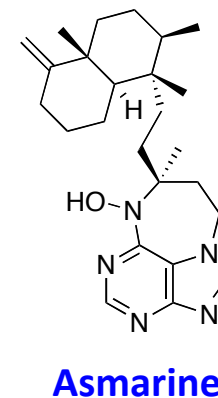
Figure 279. 1-8. *Heterostemma brownii* Hayata, 台灣刺楸 *Heterostemma brownii* (Hayata) Wight. —1. Flowering branch. —2. Flower. —3. Flower top view. —4. Calyx. —5. Pistil. —6. Stamen. —7. Foliage. —8. Seed. (POC 263, TRPS 6). 518, pl. 194, 1977. — 陈国治 (Chen Guozhi).

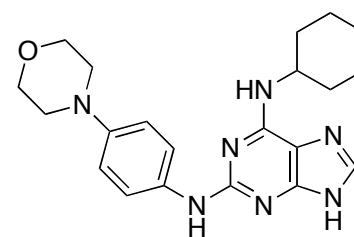
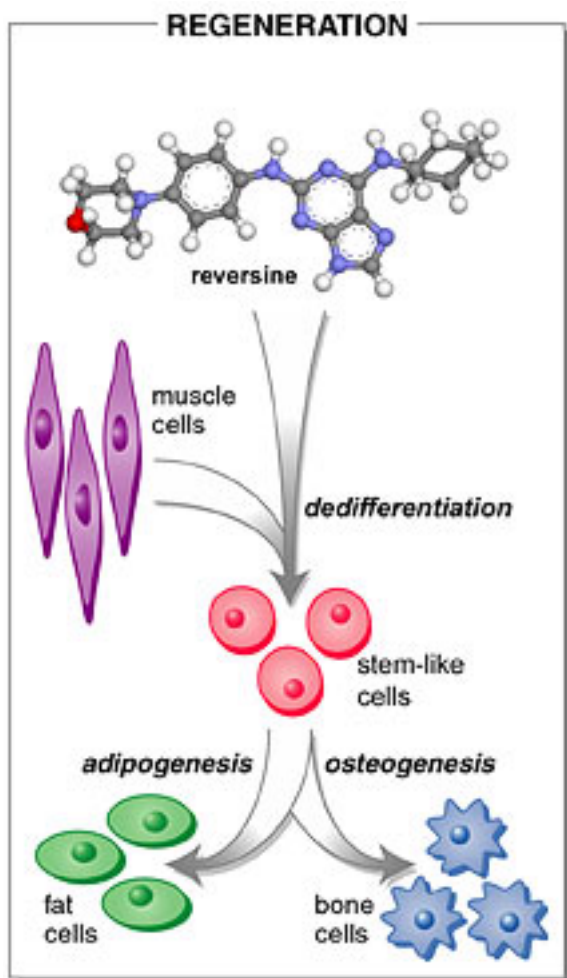


Agelasines des éponges marines (Agelas spp)



Asmarines des éponges marines

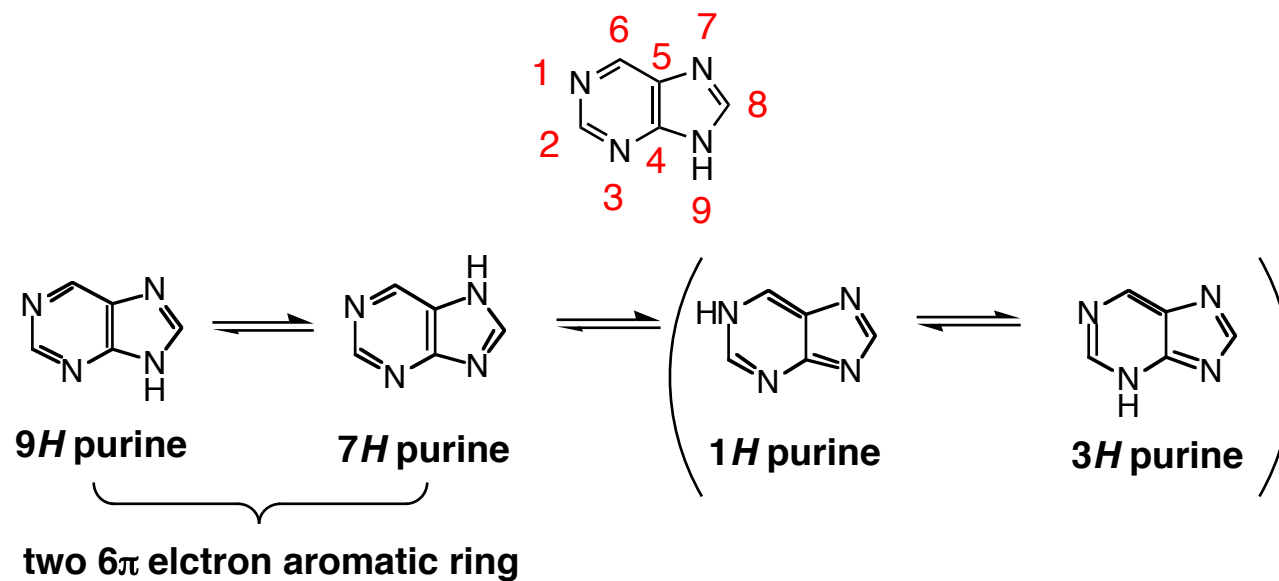




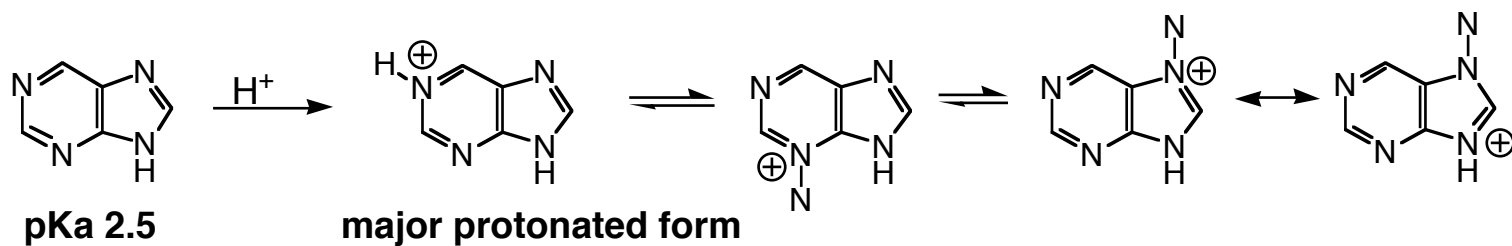
Reversine

<http://www.scripps.edu/news/press/122203.html>

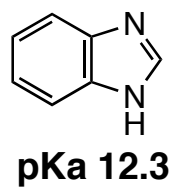
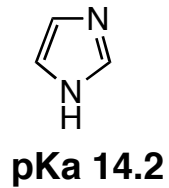
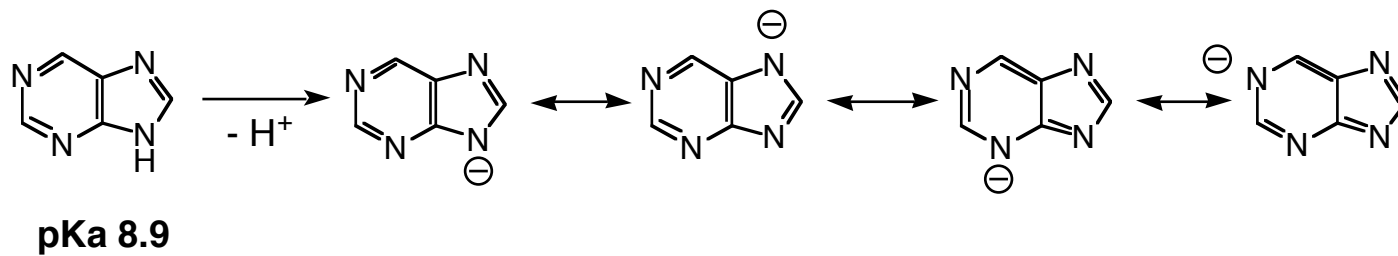
PURINES



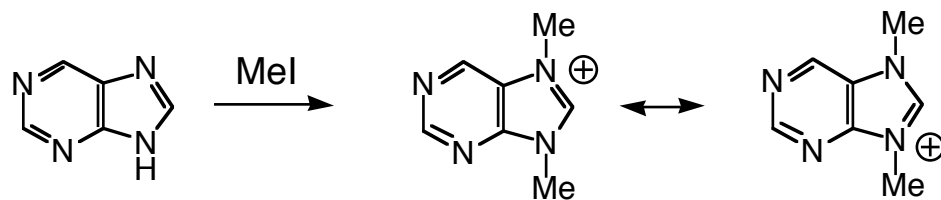
Réaction avec des électrophiles : N - Protonation



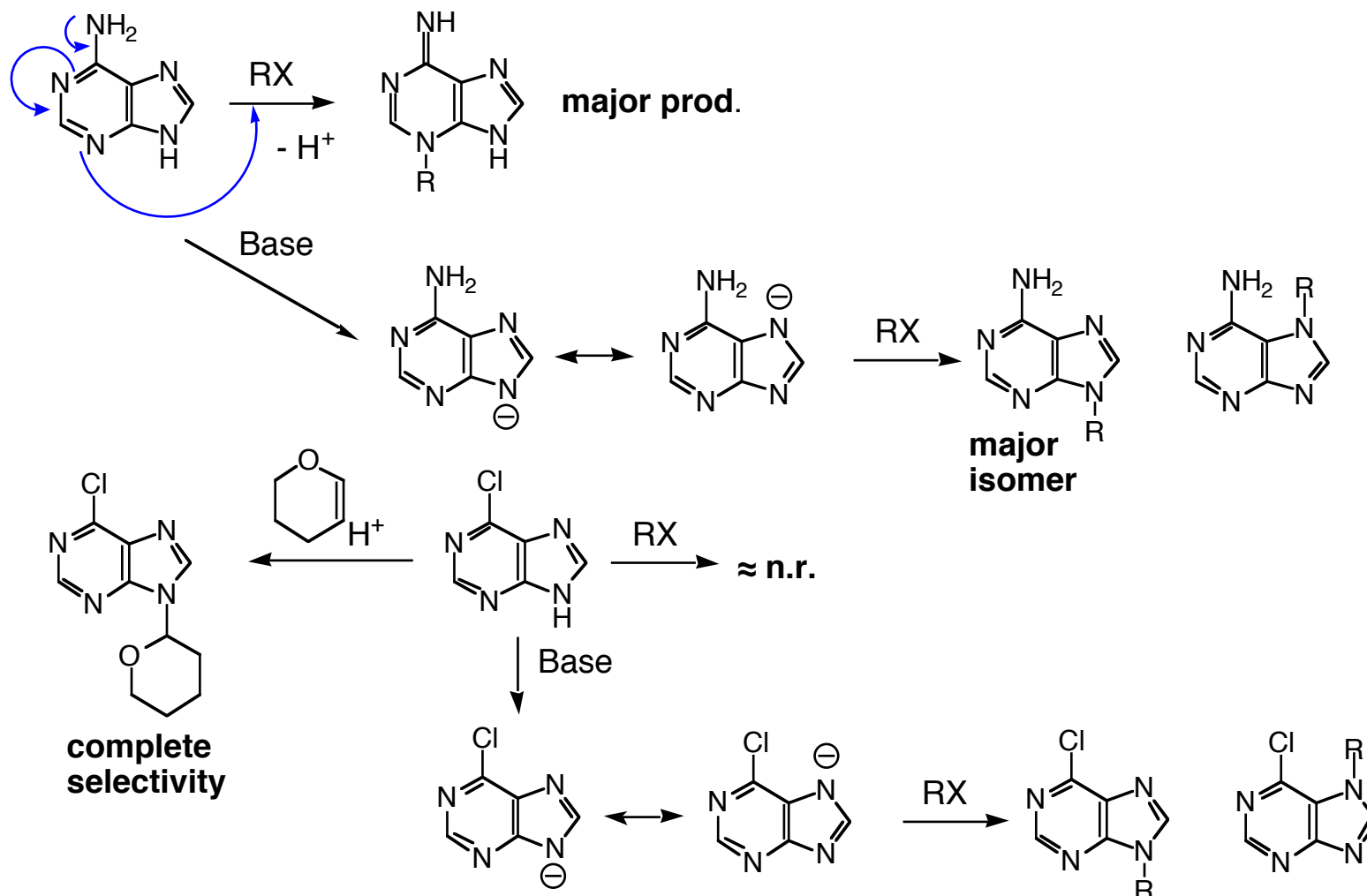
Déprotonation de N



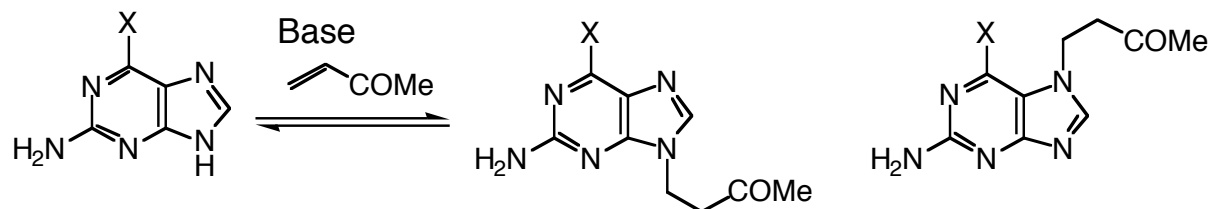
Réaction avec des électrophiles : N - Alkylation



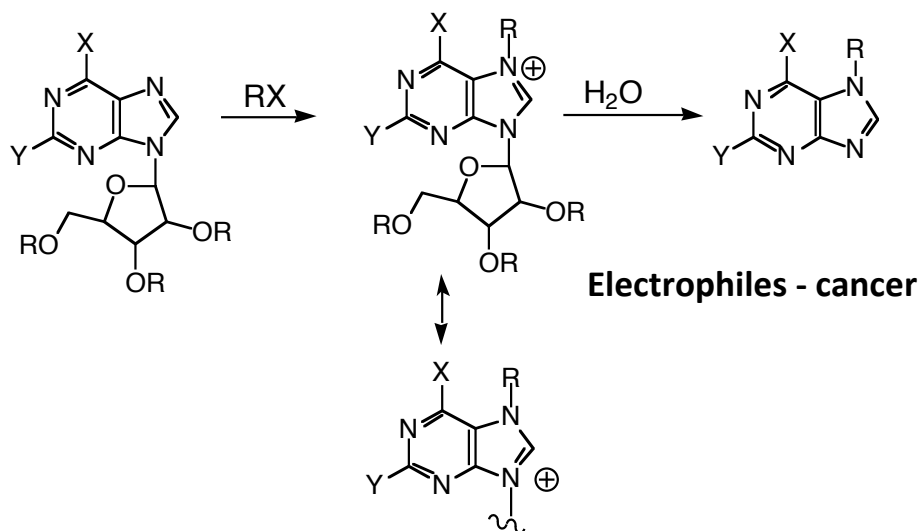
La sélectivité dépend des substituants et des conditions



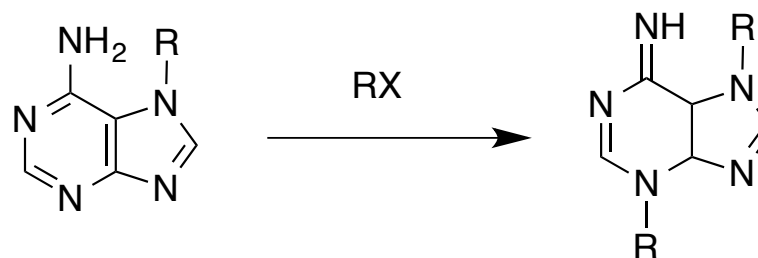
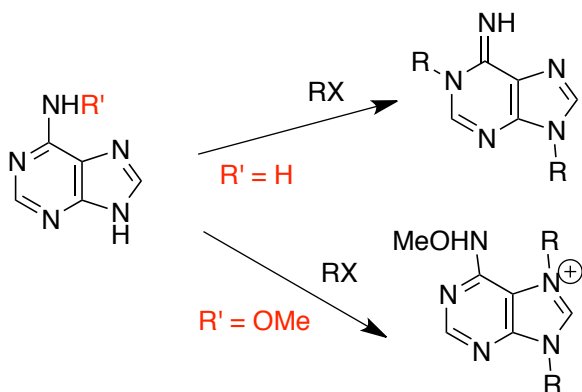
**N7/N9: - Facteurs stériques (Grand subst-6)
(réact. réversible)**



X	Time	N9 / N7
Cl	1h	4.3 : 1
Cl	24h	19 : 1

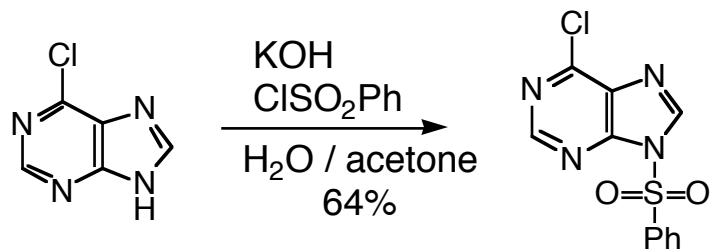


OMe 1h 1 : 1
OMe 14 days Still mixt.

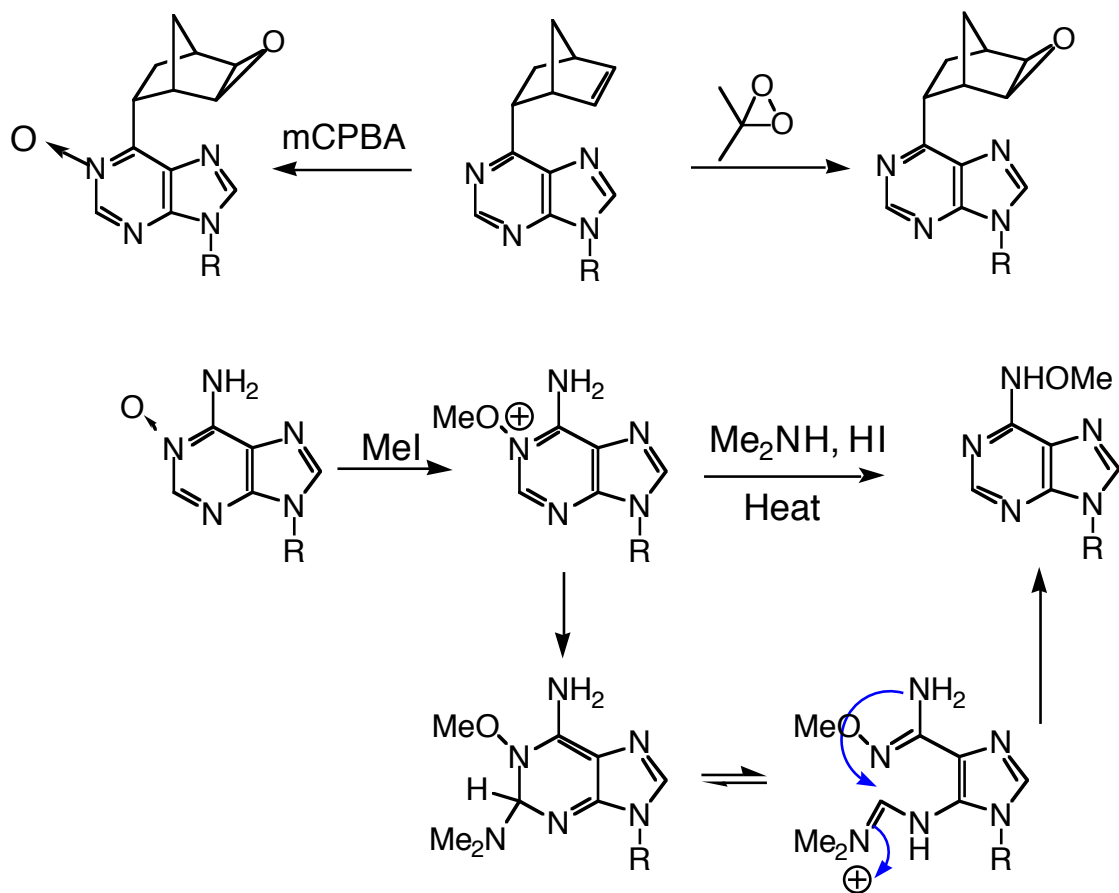


Réaction avec des électrophiles : N- Acylation / Sulfonation

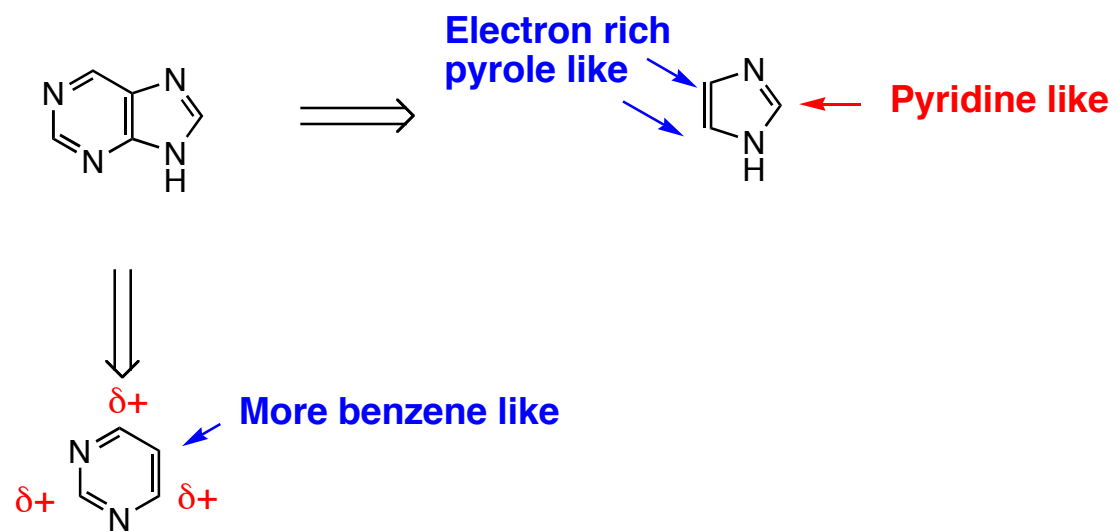
Produits d'acylation généralement instables
Prod. Sulfonation – Stable , sélective N9



Réaction avec des électrophiles: N - oxydation

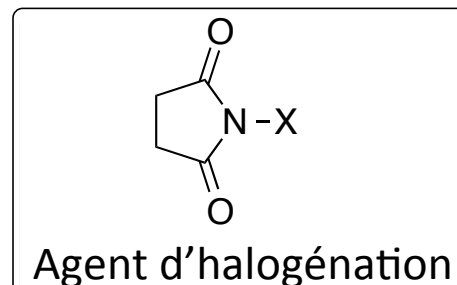
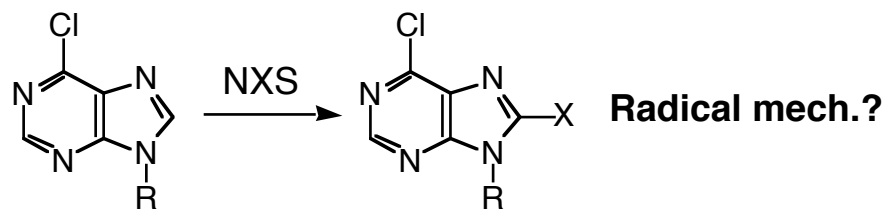
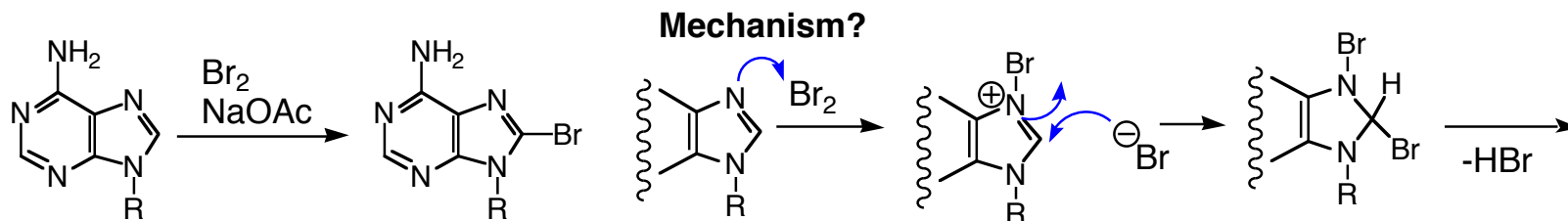


Réaction avec des électrophiles sur C



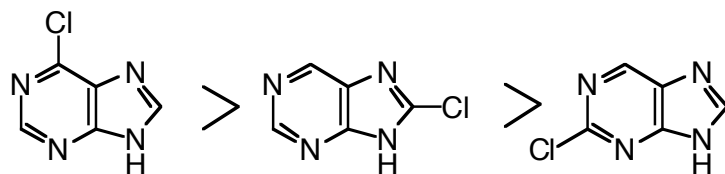
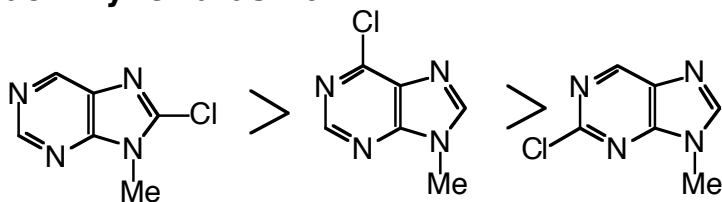
Réaction avec des électrophiles sur C

SE Ar ne fonctionne généralement pas

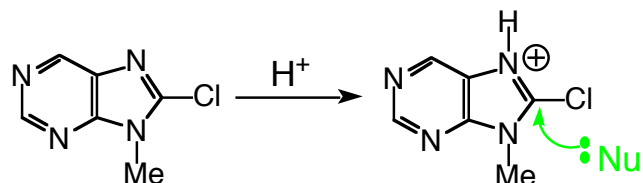
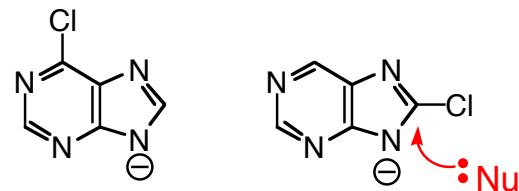


Réaction avec des nucléophiles

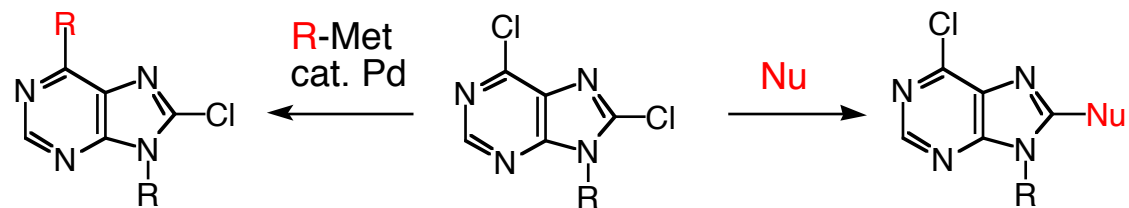
Reactivity towards Nu



Most probably react. on

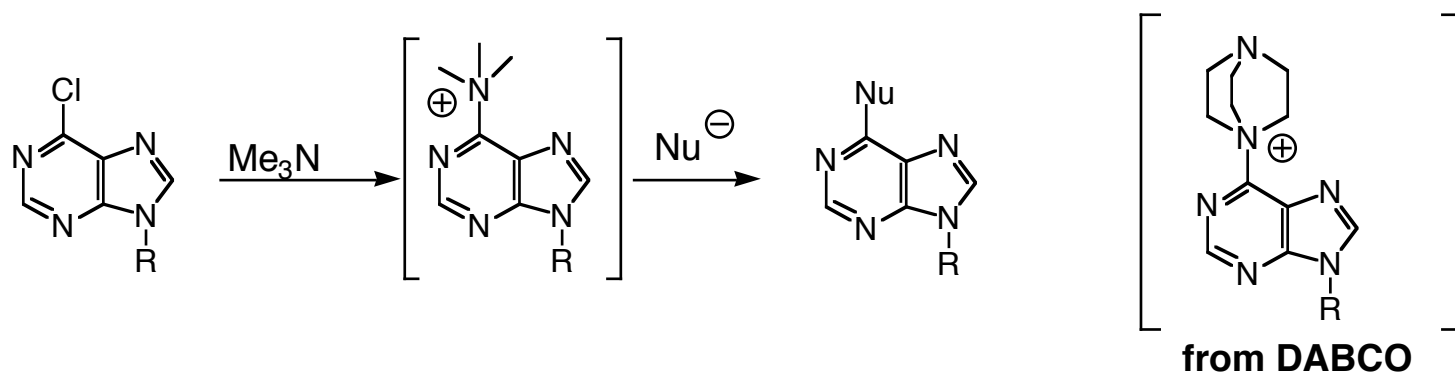


activated for Nu attack

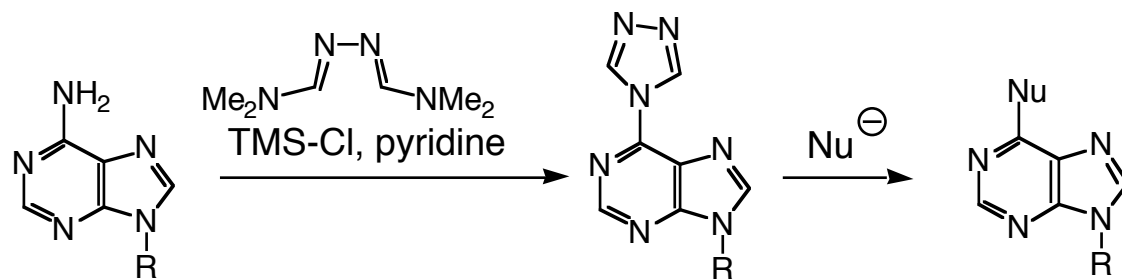


Subst. Nu. Ar. : Réactivité F>Cl>Br>I

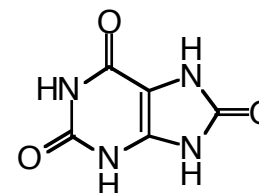
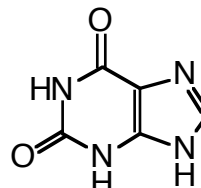
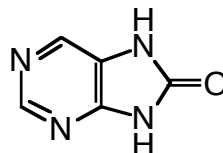
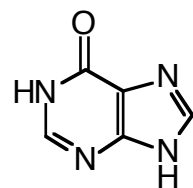
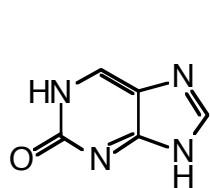
Autres groupes sortants



DABCO: 1,4-diazabicyclo[2.2.2]octane



Oxy purines

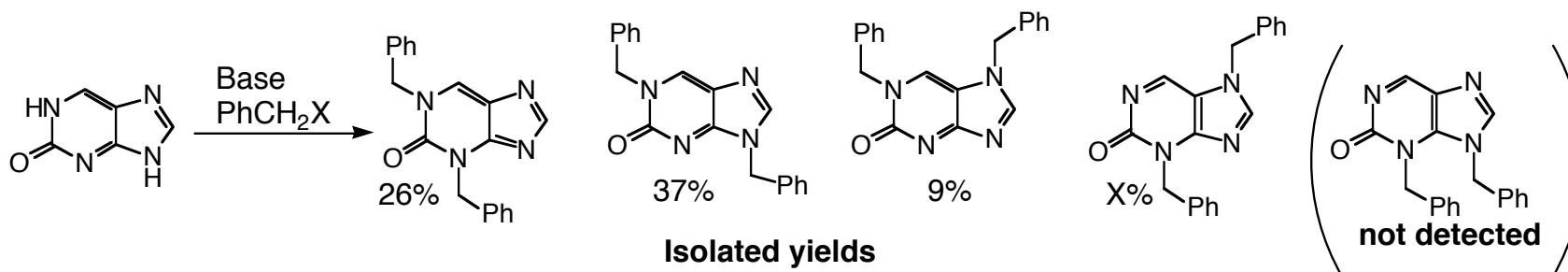
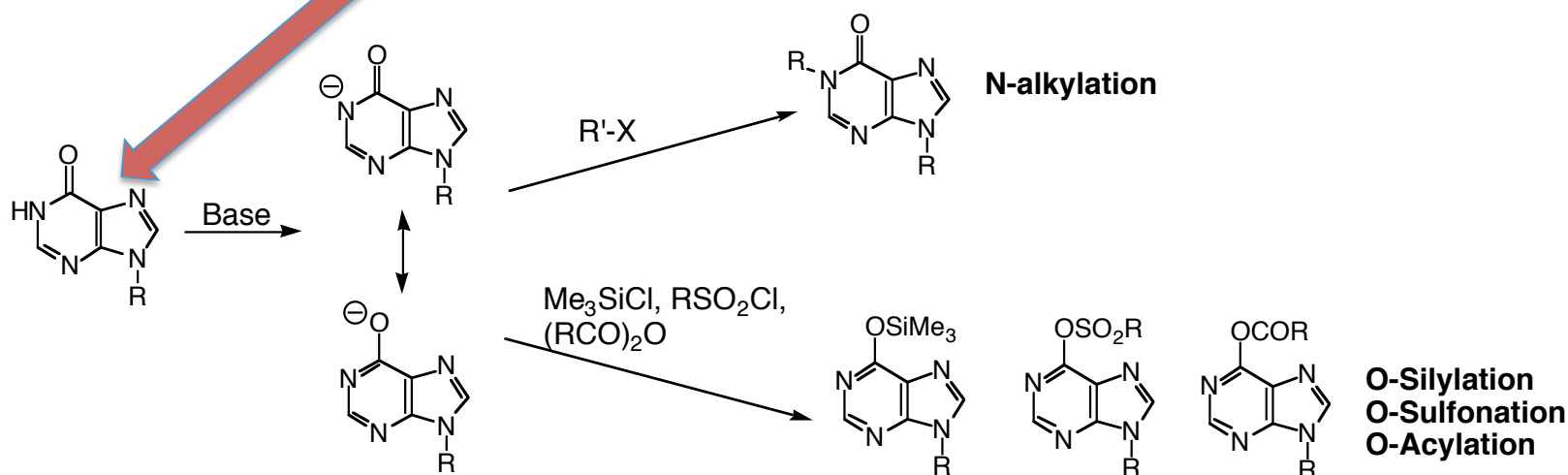


Hypoxanthine

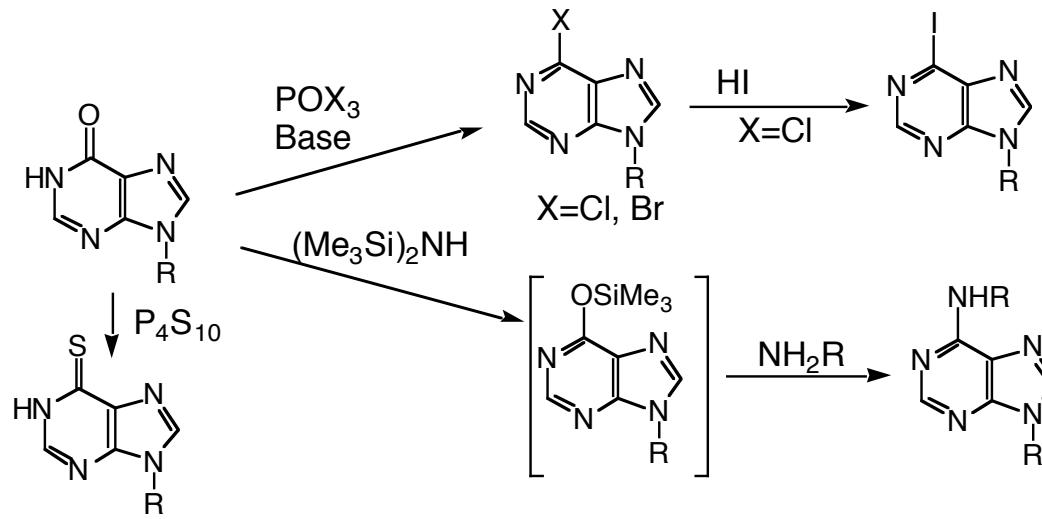
Xanthine

Uric acid

Alkylation, acylation etc



Remplacement de O avec d'autres hétéro atomes

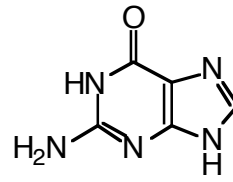


Amino purines

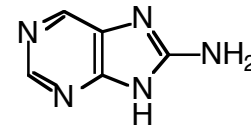
Forme Amino



Adenine



Guanine



Diazotation etc.

