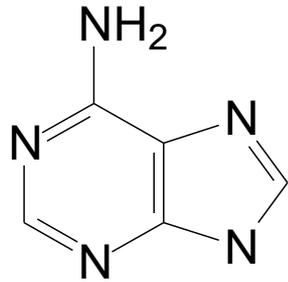


## **Αντικαρκινικά φάρμακα**

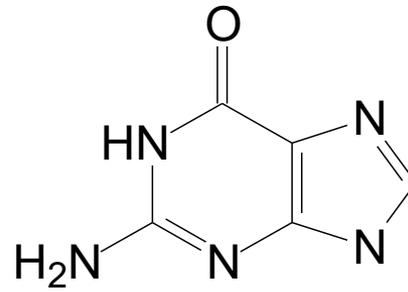
**Αλληλεπίδραση με νουκλεϊνικά οξέα**

**Επίδραση επί ενζύμων**

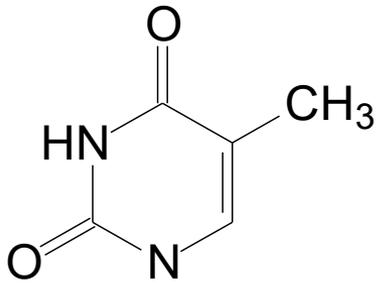
## ΔΟΜΗ ΝΟΥΚΛΕΪΝΙΚΩΝ ΟΞΕΩΝ



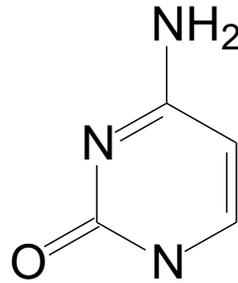
A



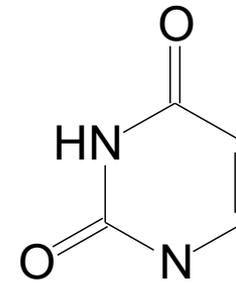
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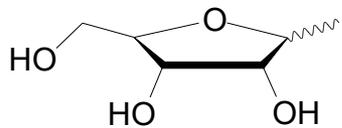
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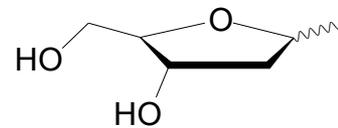
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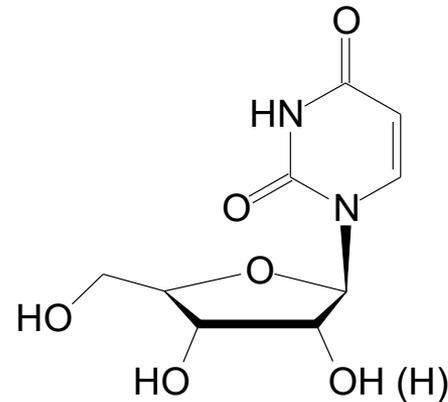
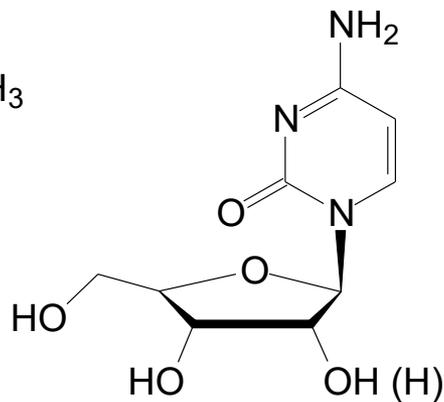
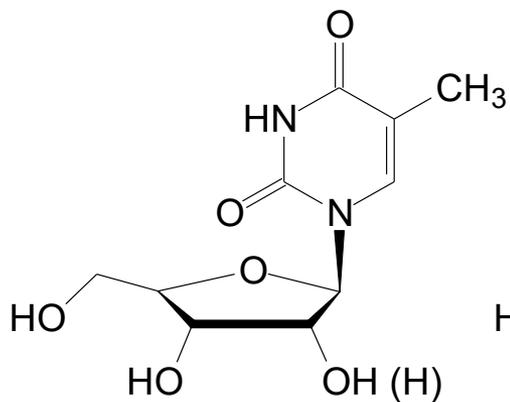
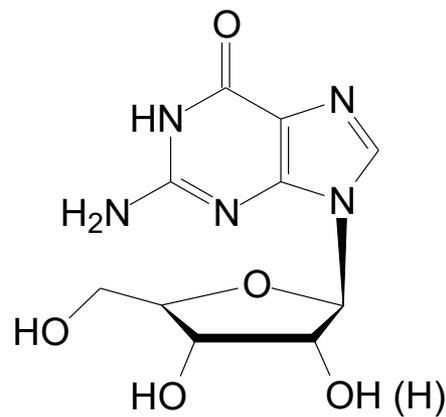
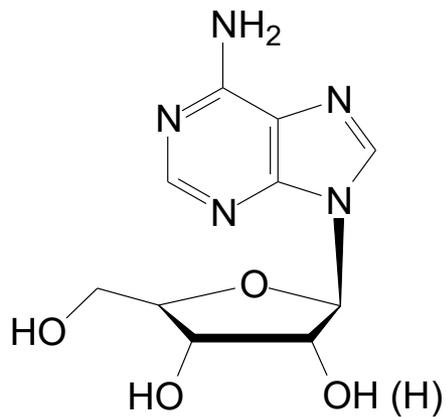
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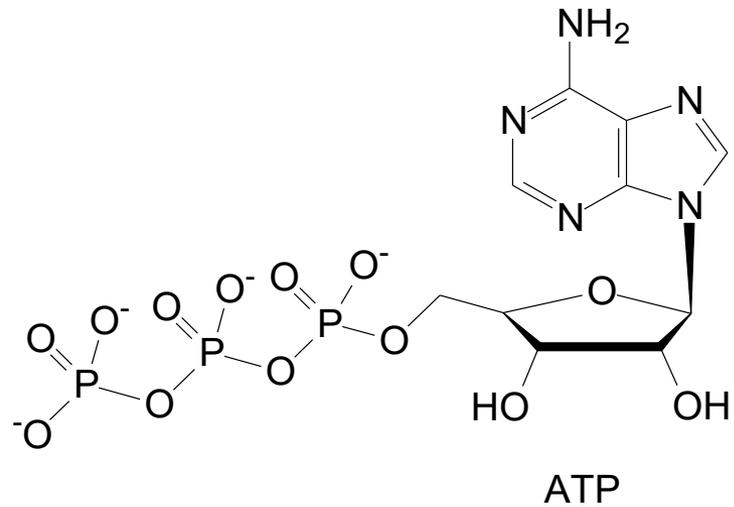
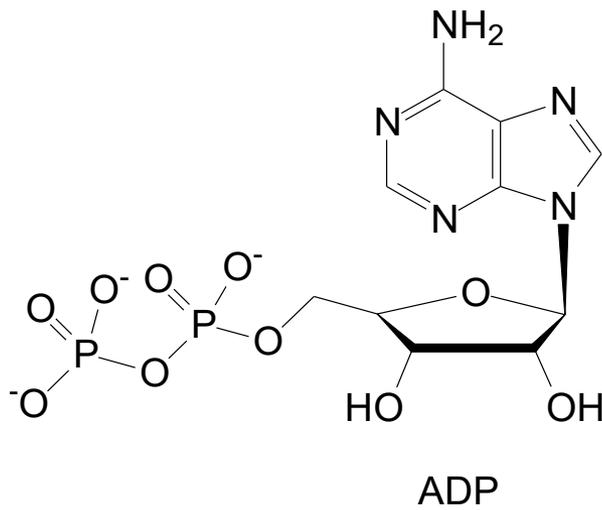
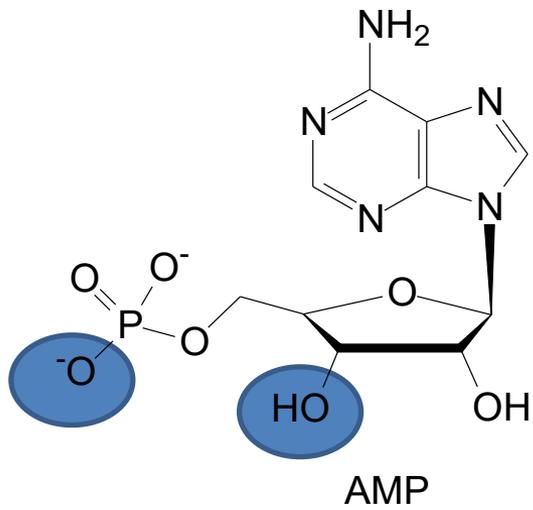


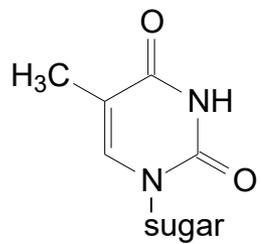
ribose



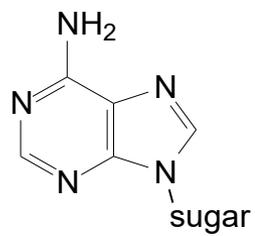
2-deoxyribose



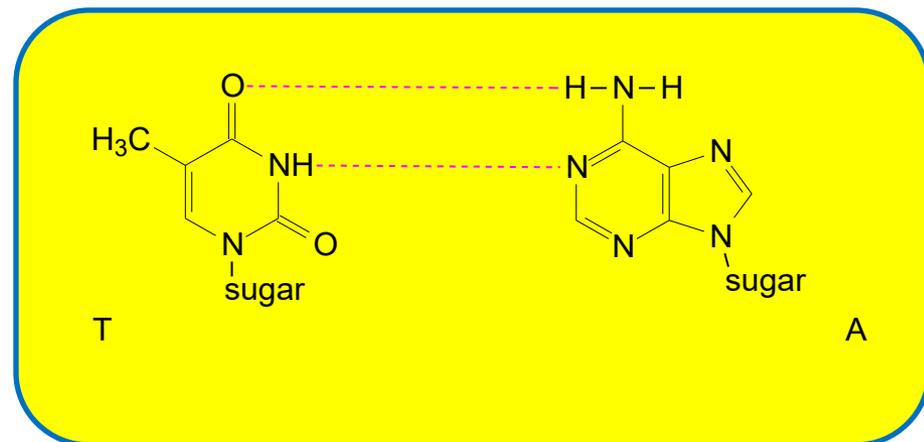




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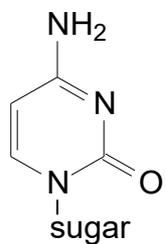


A

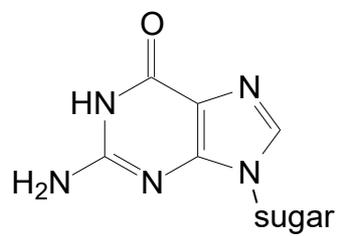


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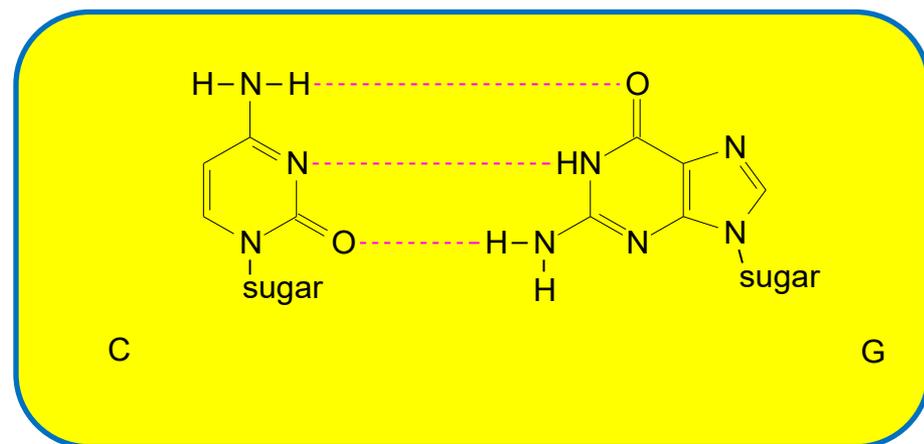
A



C



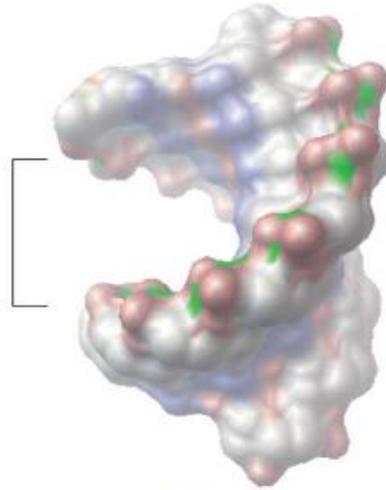
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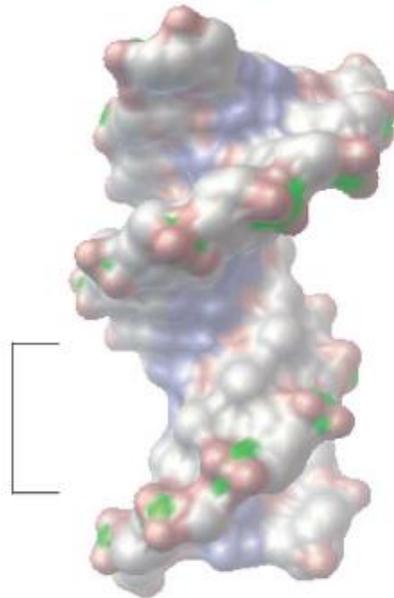
C

G

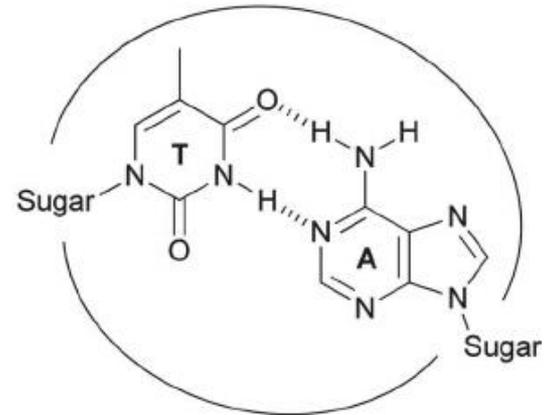
Major Groove (A-DNA)



Major Groove (B-DNA)

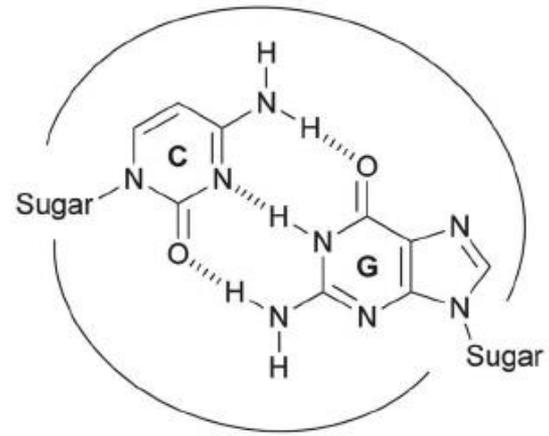


Major Groove

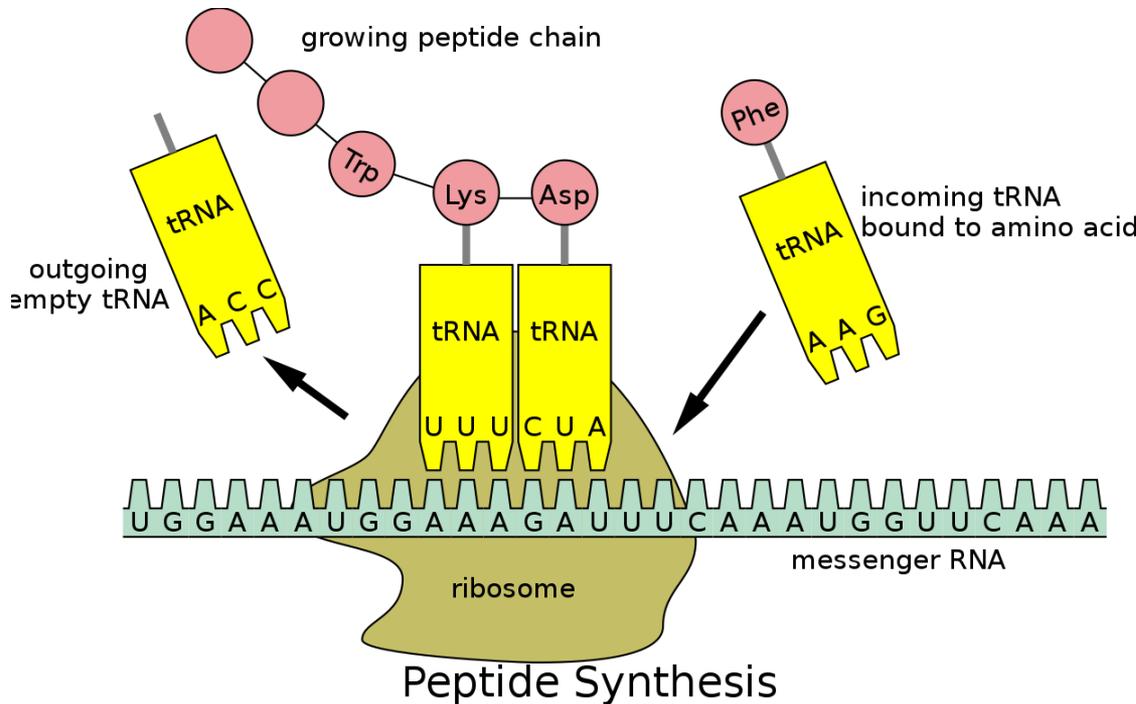
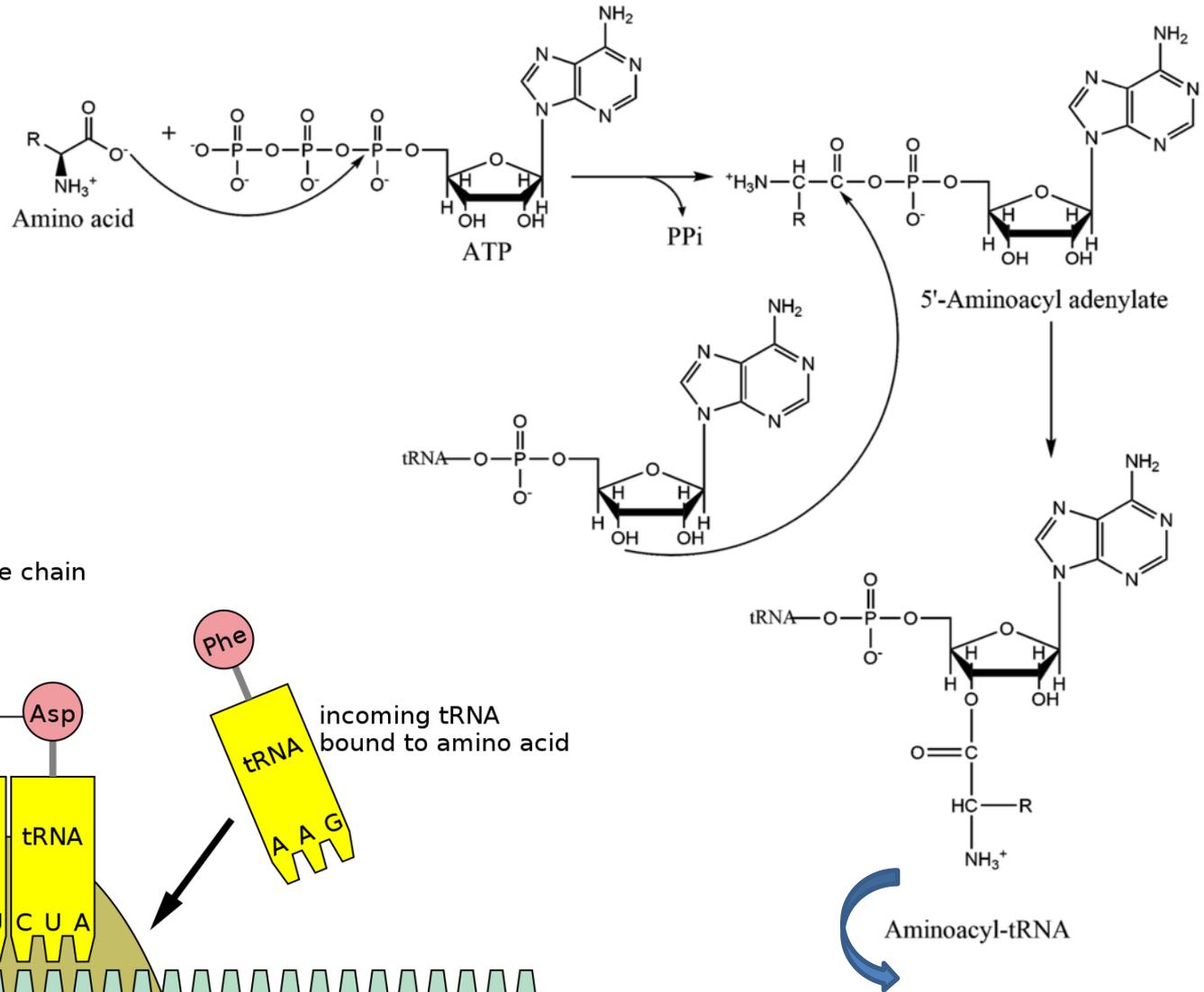


Minor Groove

Major Groove

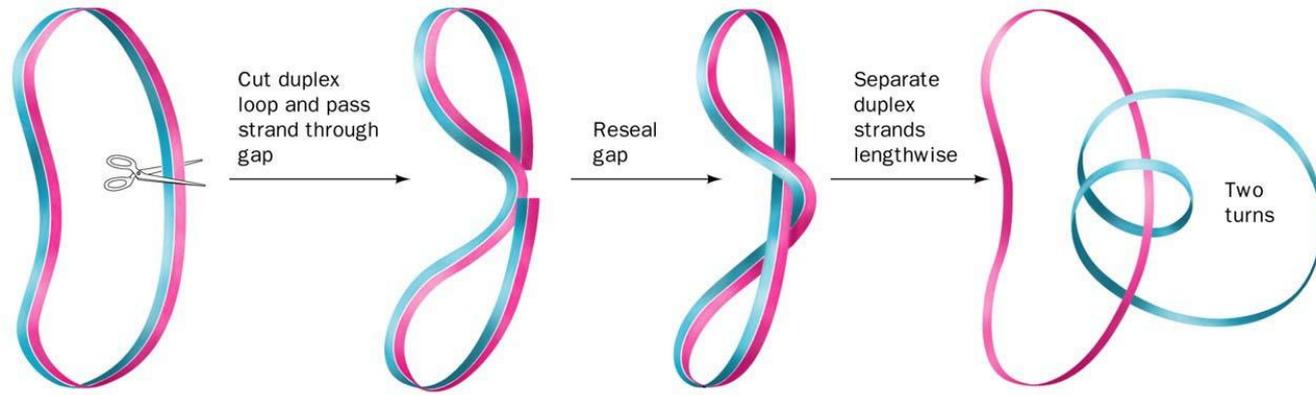


Minor Groove

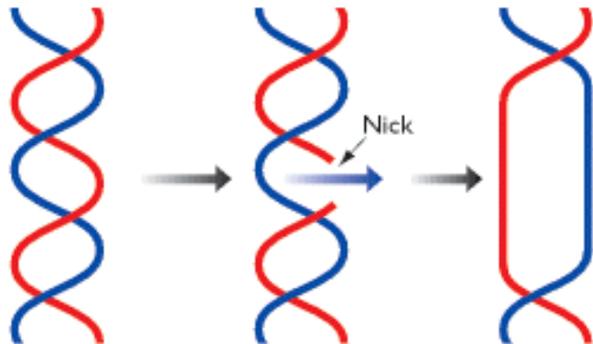


Η βιοσύνθεση πρωτεϊνών γίνεται  
 από N-τελικό προς C-τελικό άκρο

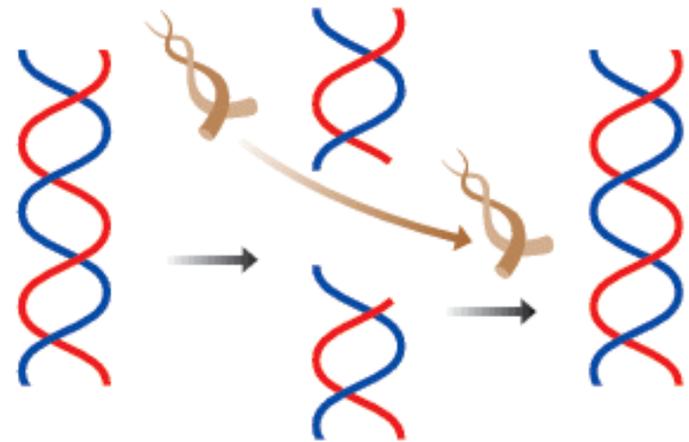
# Τοποϊσομεράσες



(A) Type I



(B) Type II

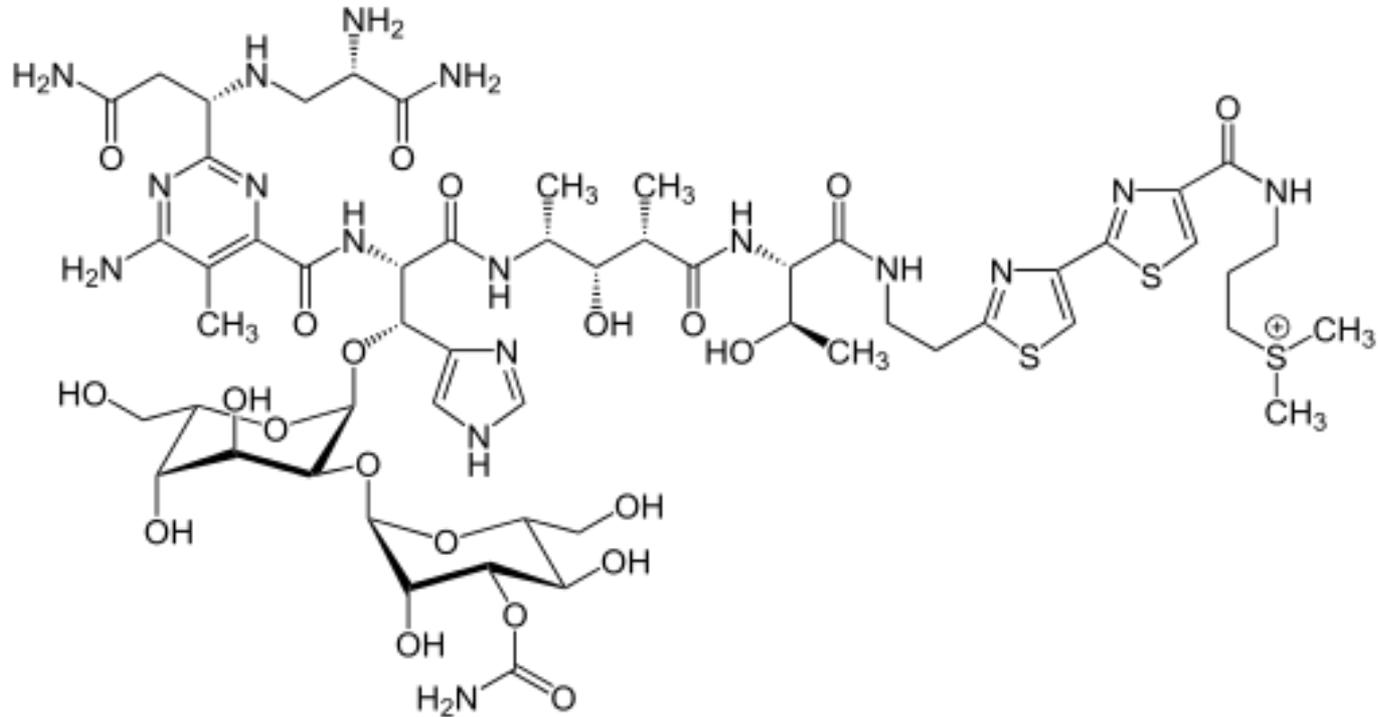


## Αλληλεπίδραση DNA με μικρά μόρια

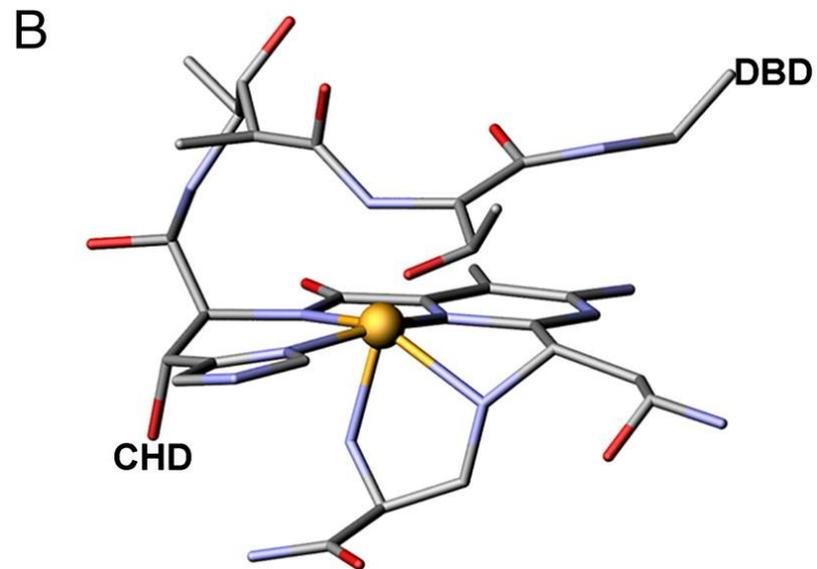
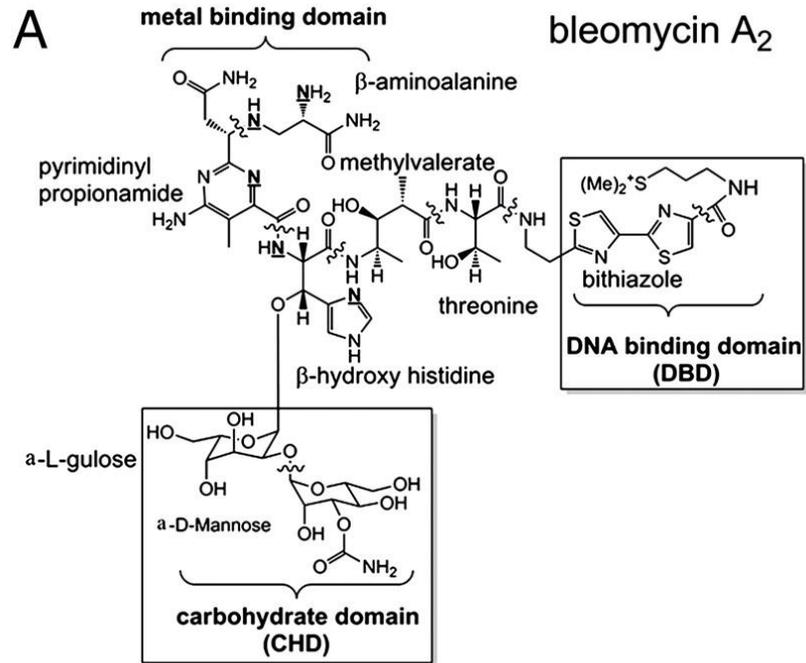
- Σχάση αλυσίδας, οξειδωτική ή υδρολυτική
- Σχηματισμός μη ομοιοπολικού δεσμού
- Σχηματισμός ομοιοπολικού δεσμού
- Ενδοπαραμβολή
- Συνδυασμός των παραπάνω

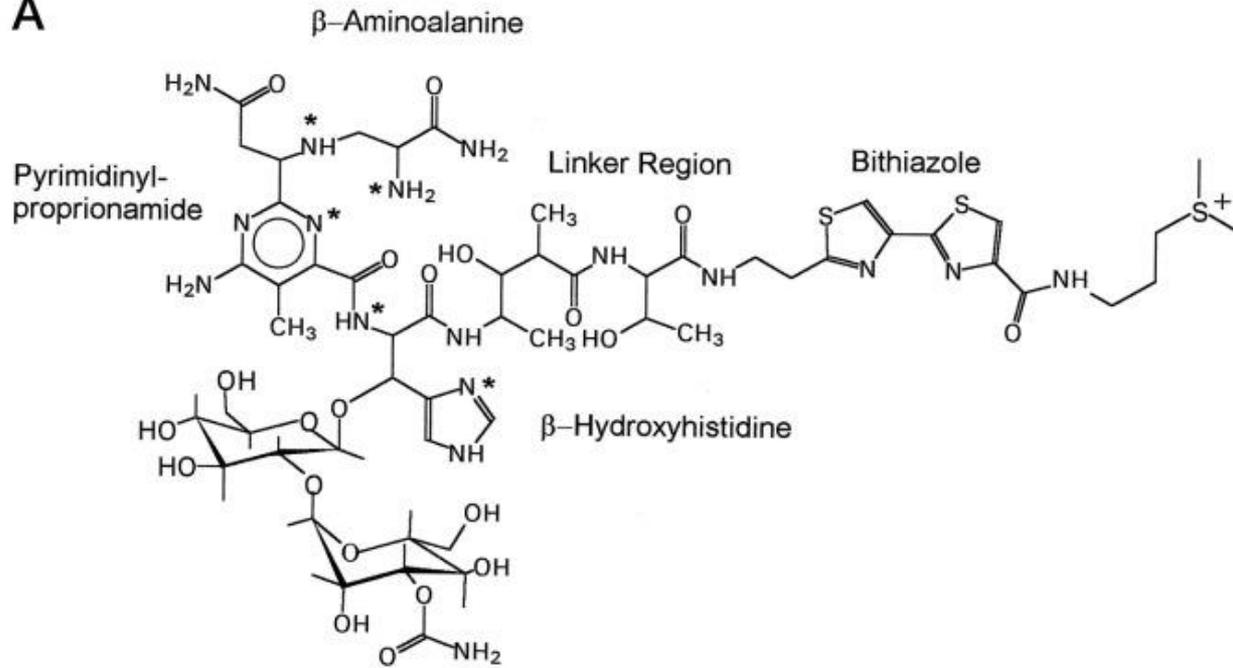
## Μόρια που προκαλούν σχάση της αλυσίδας του DNA

### Οξειδωτική σχάση της αλυσίδας

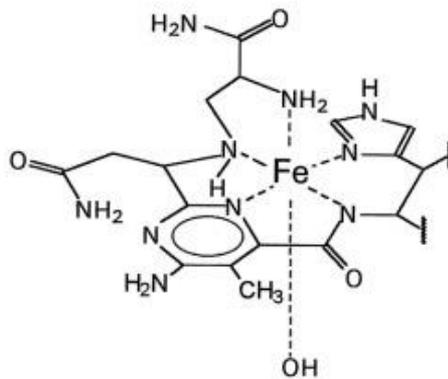


Bleomycin A2

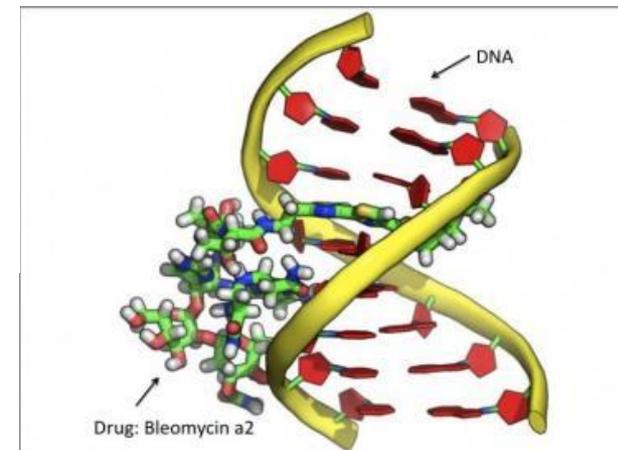


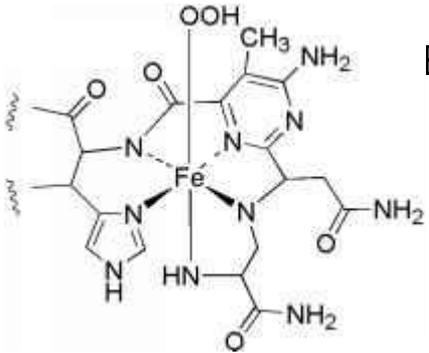
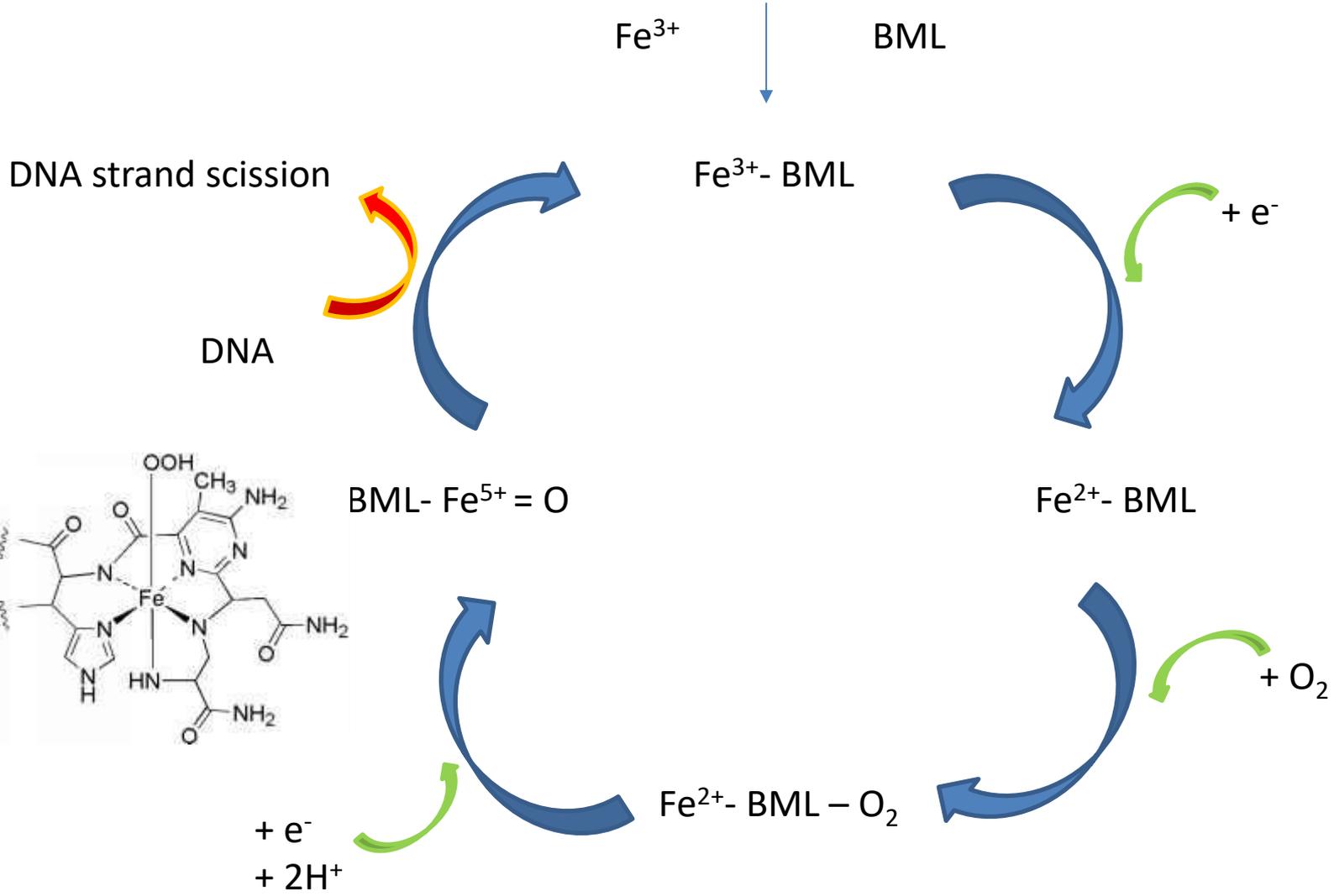
**A**

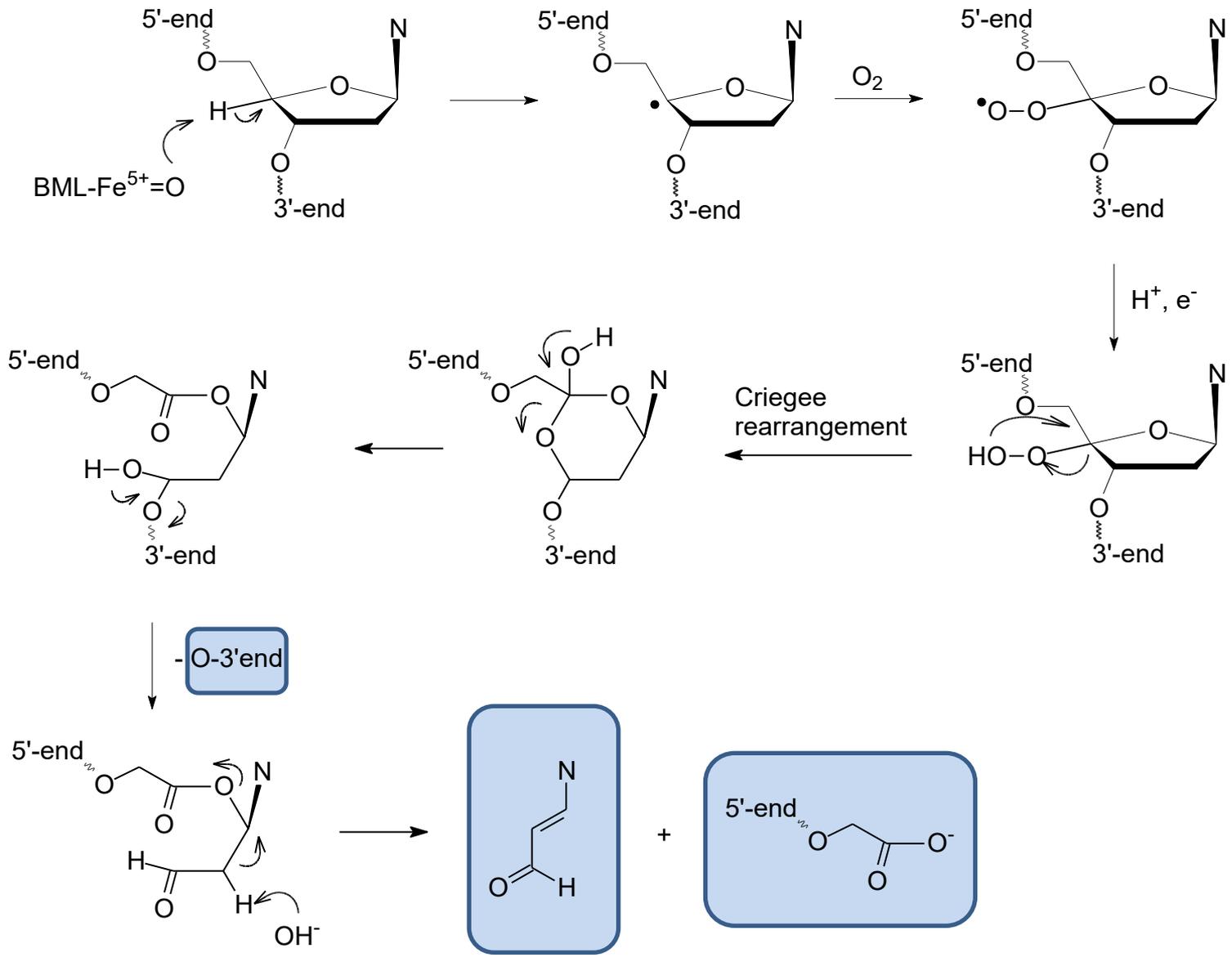
Bleomycin A2, \*: σημεία συμπλοκοποίησης με  $Fe^{3+}$

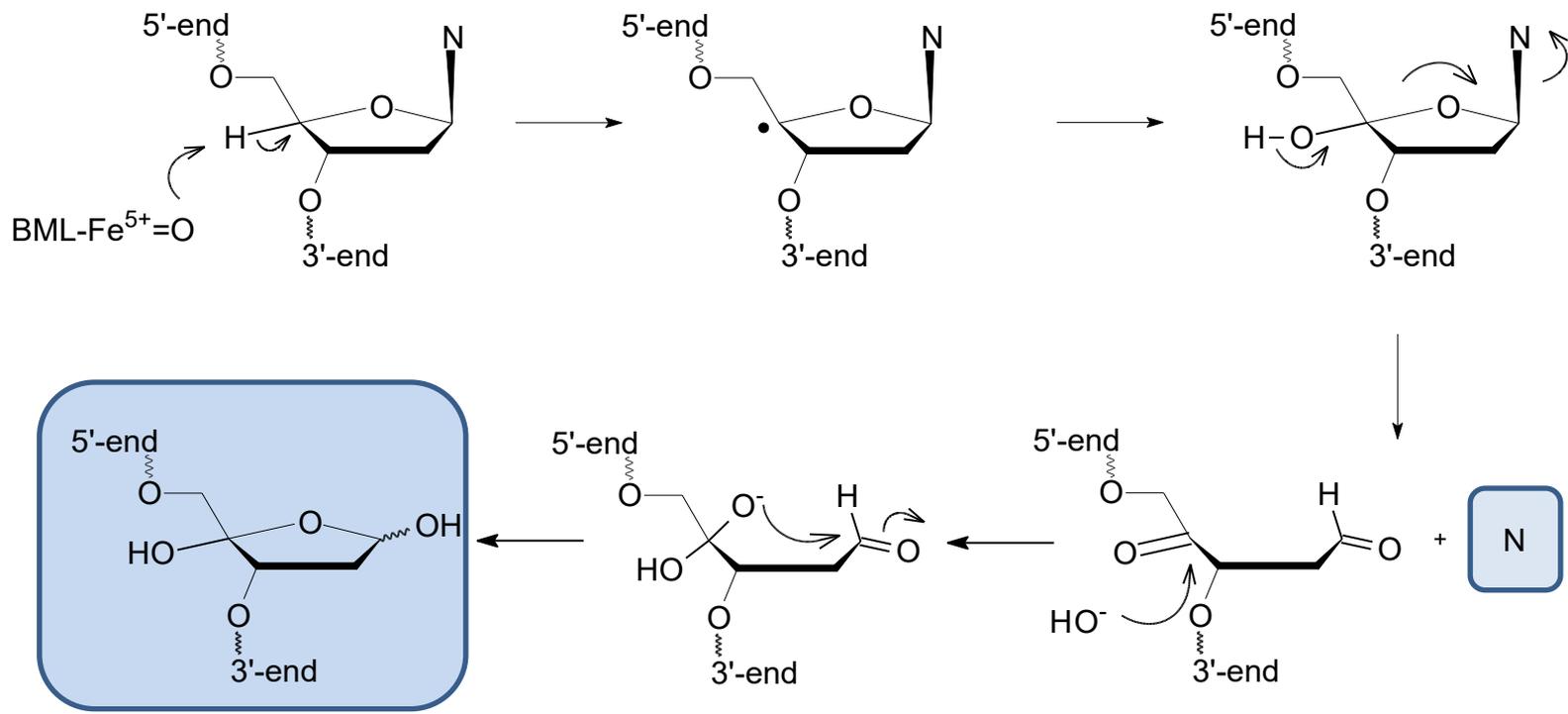
**B**

Προτίμηση για GC και GT αλληλουχίες

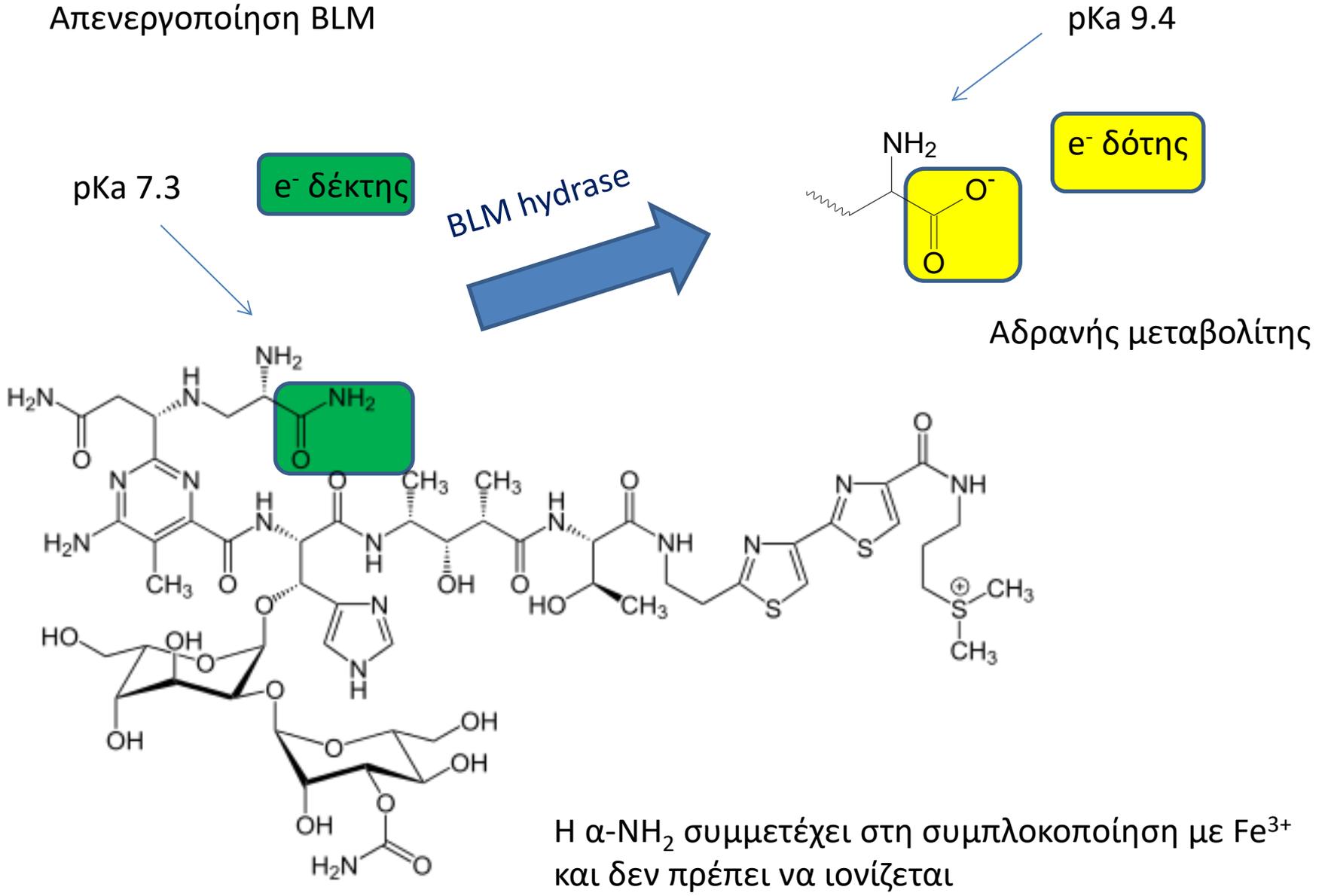




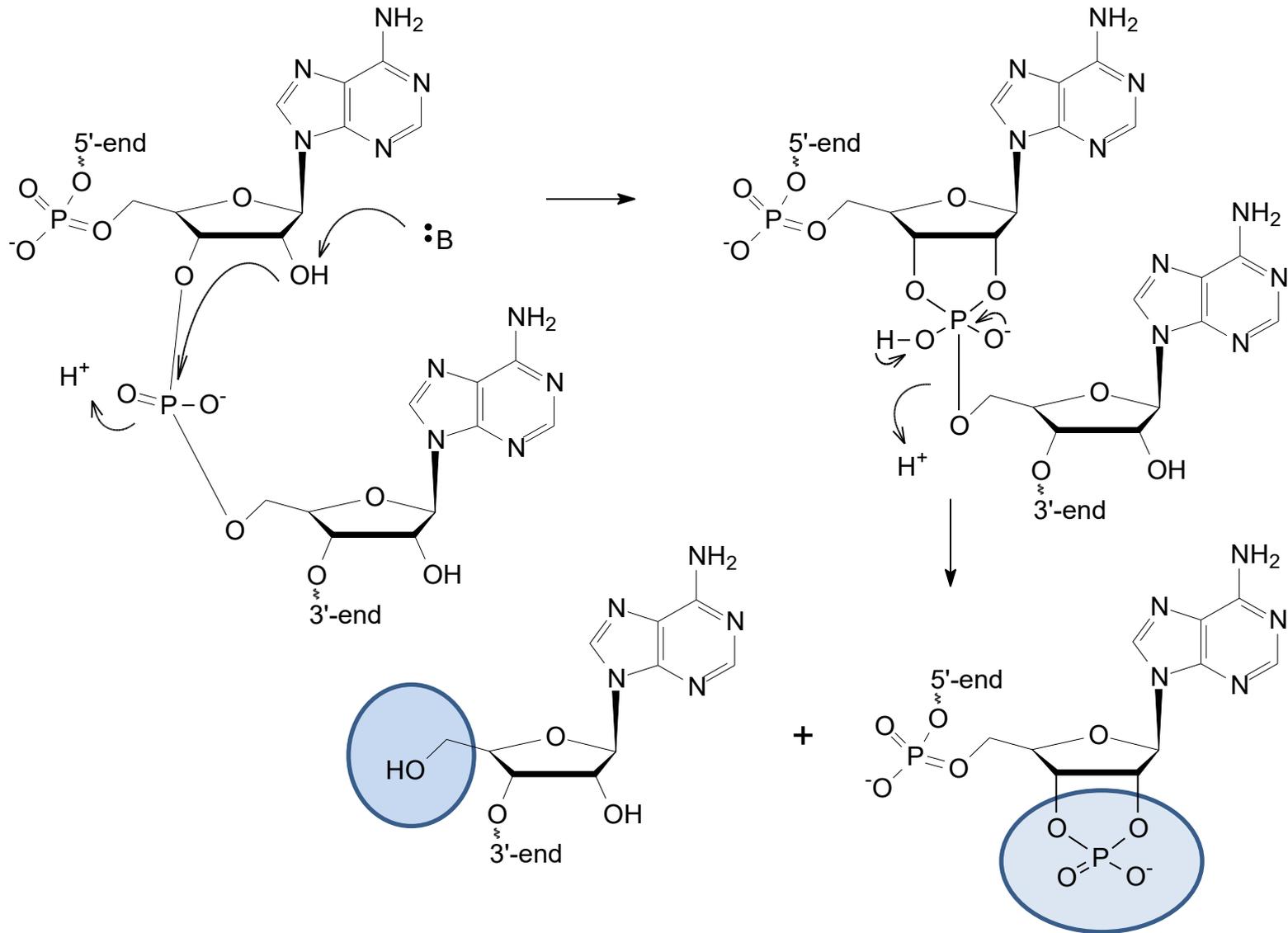




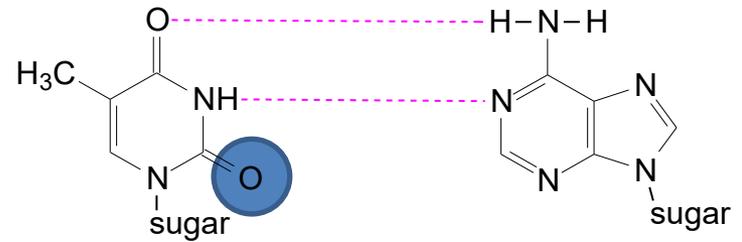
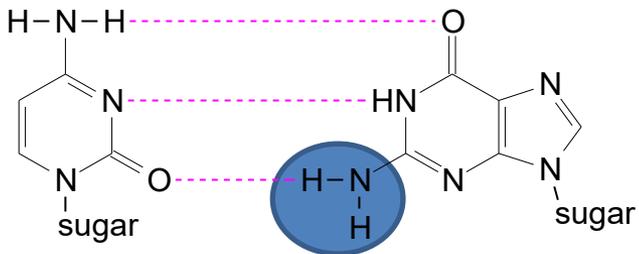
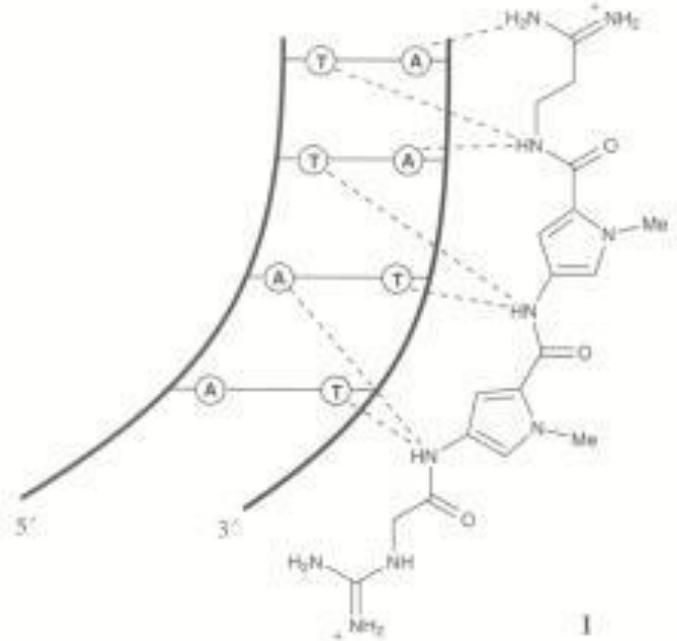
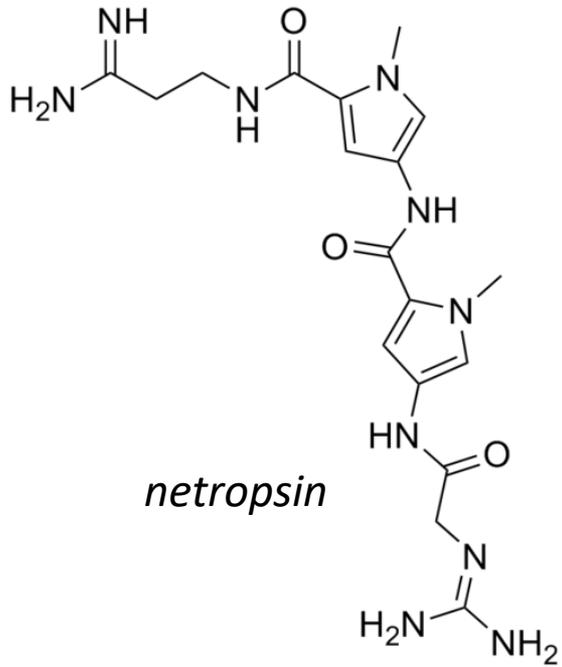
# Απενεργοποίηση BLM



# Υδρολυτική σχάση της αλυσίδας



# Μόρια που συνδέονται μέσω μη ομοιοπολικού δεσμού με το DNA

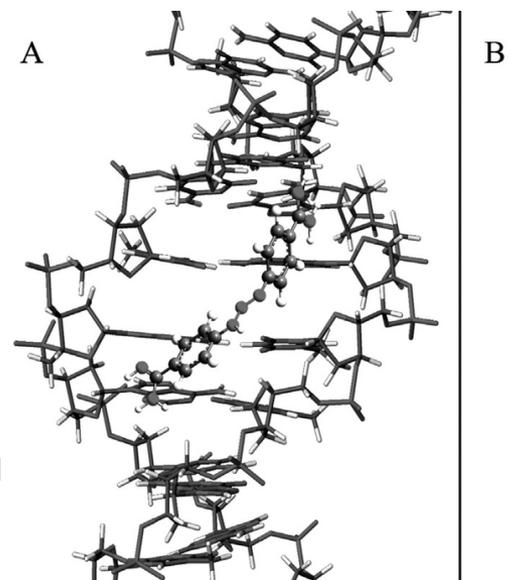
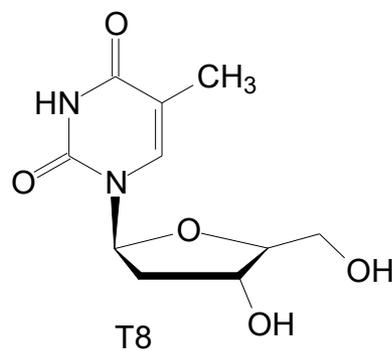
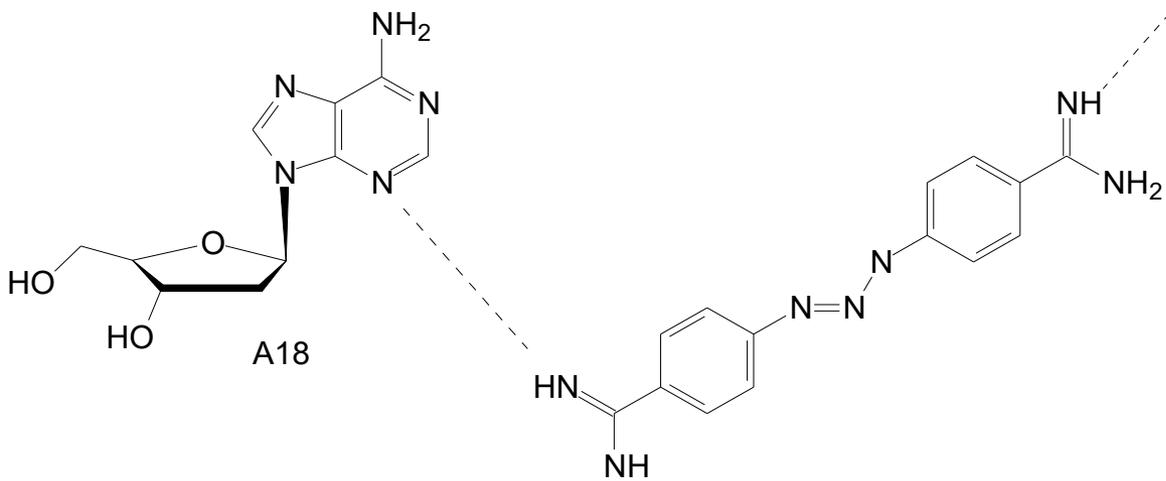
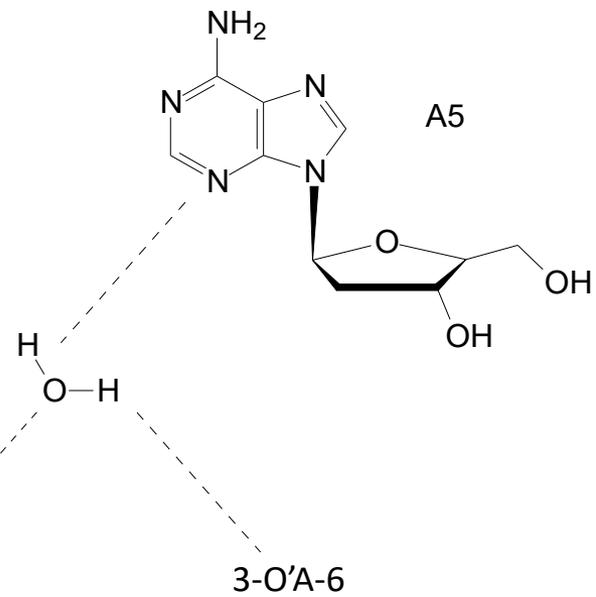
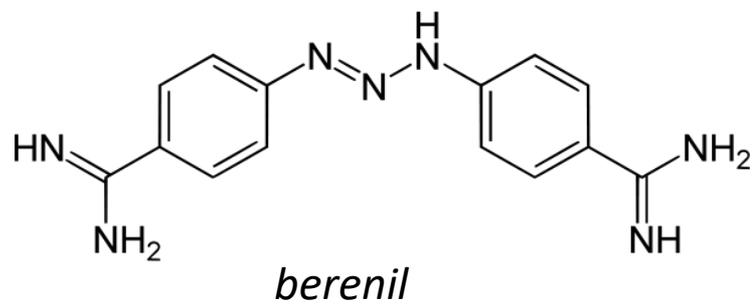


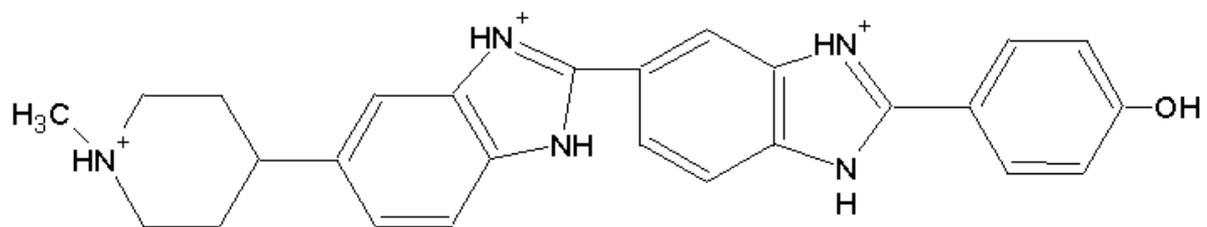
C

G

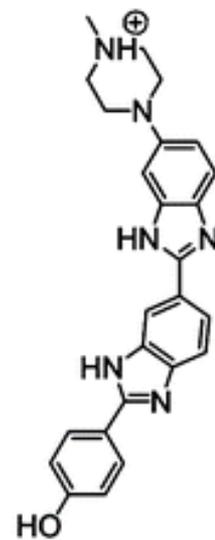
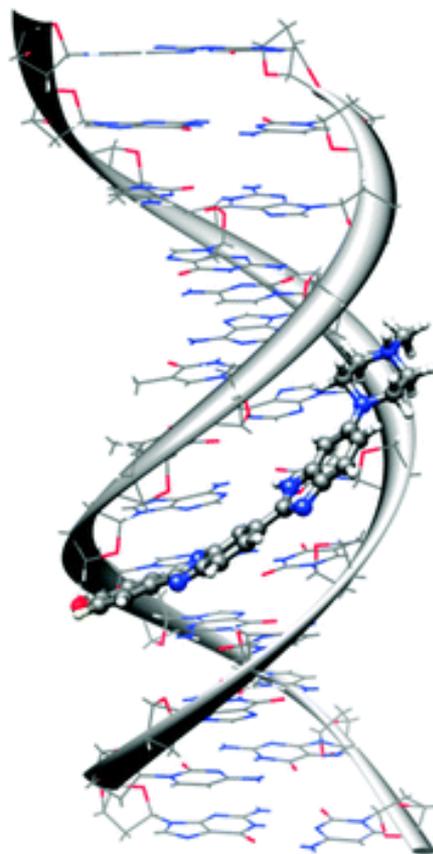
T

A

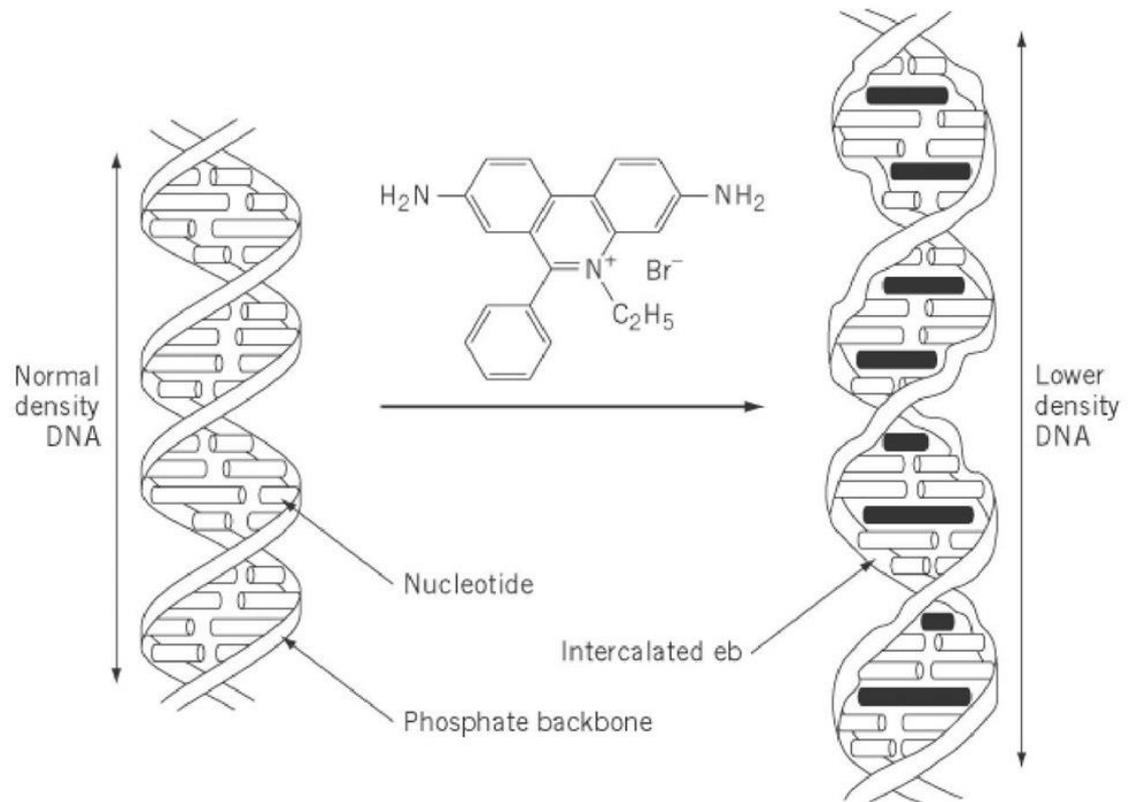
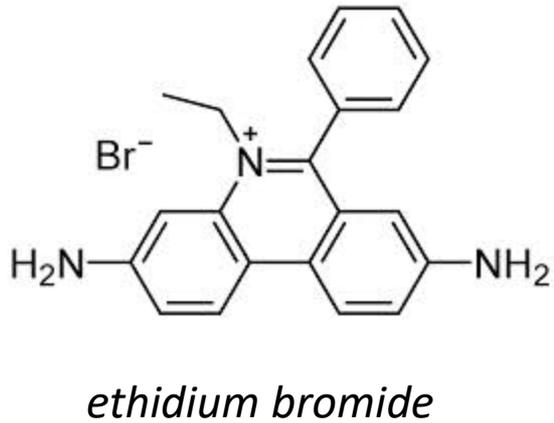


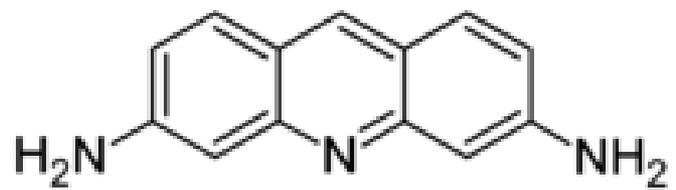


*Hoechst 33258*

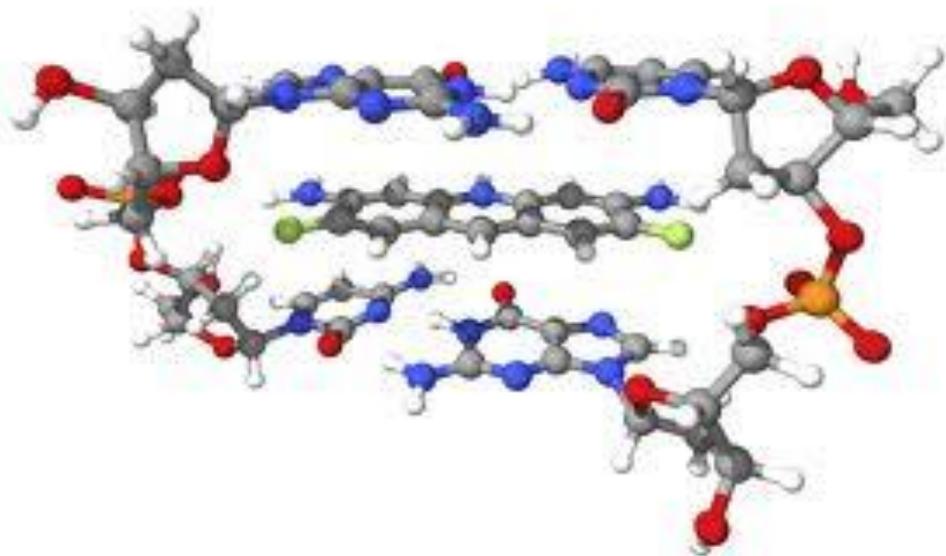
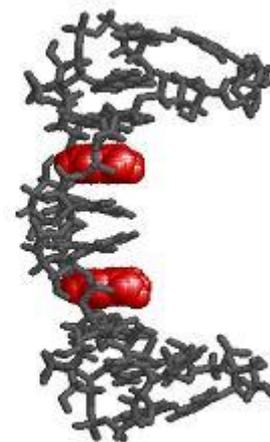
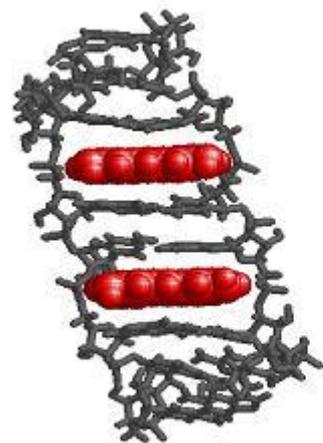


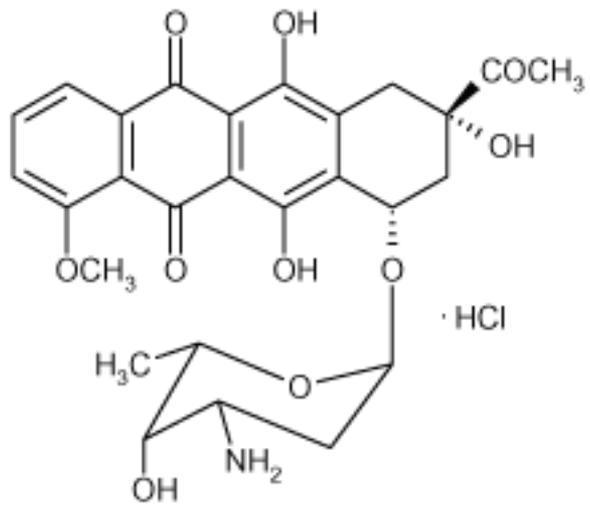
## Μόρια που ενδοπαρεμβάλλονται στο DNA



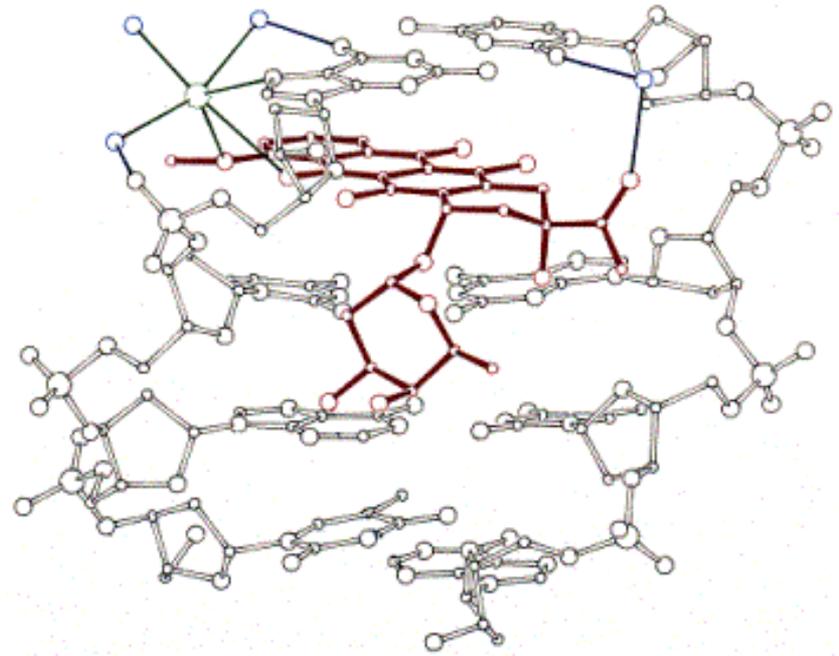


*proflavin*





*daunomycin*



# Αλκυλιωτικά

