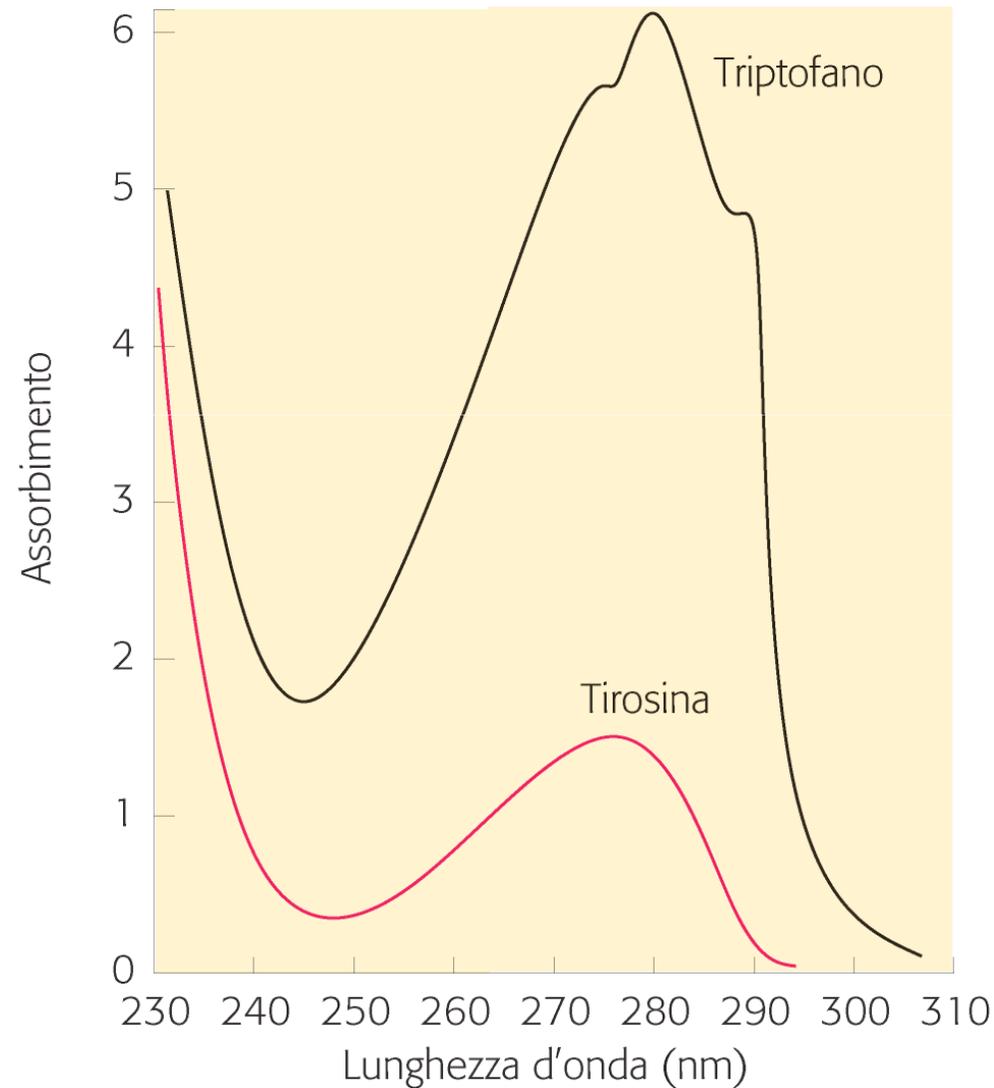


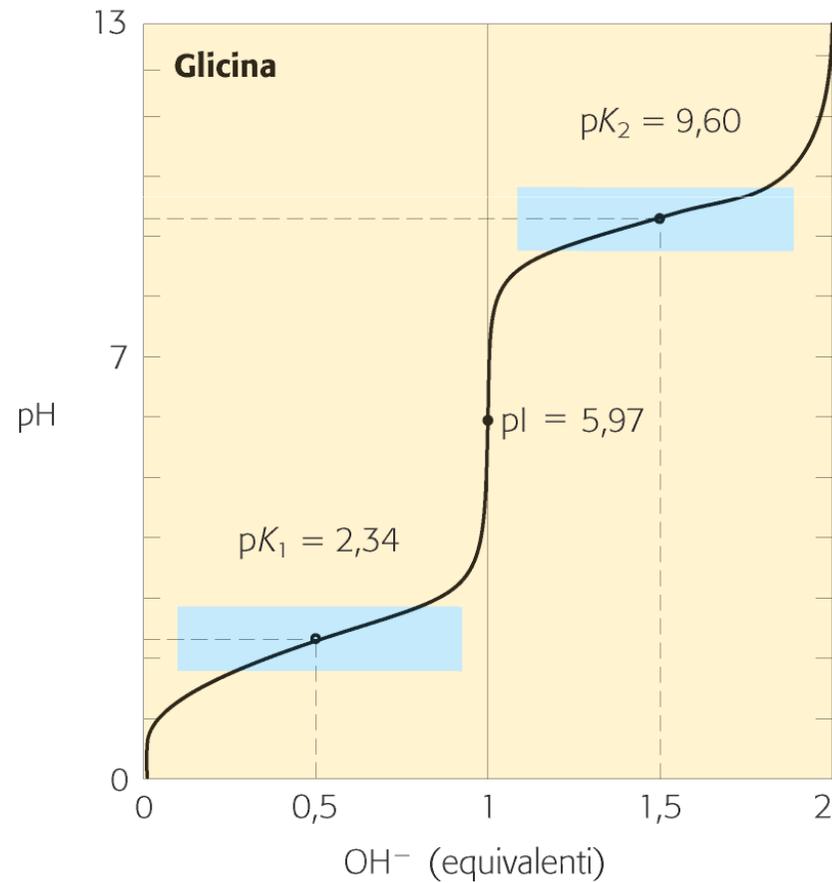
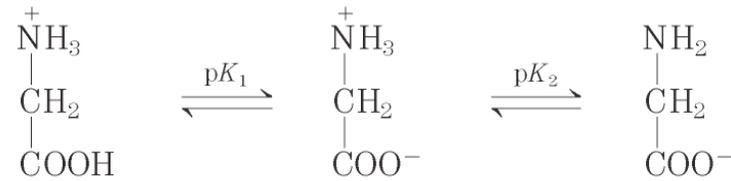
Capitolo 3:

Amminoacidi, peptidi e proteine

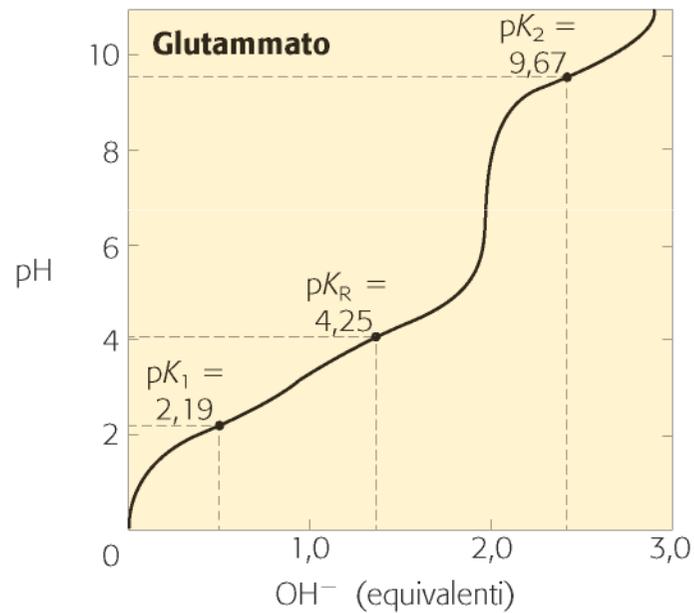
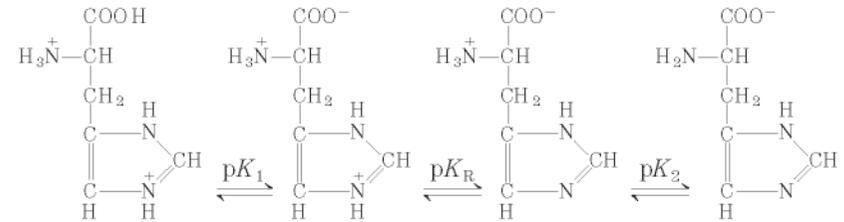
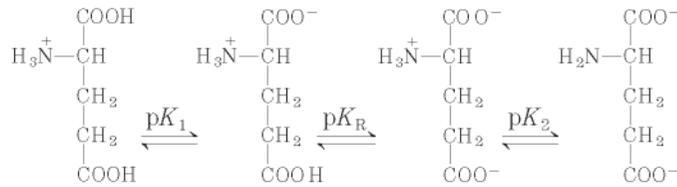
3.6 – Assorbimento della luce ultravioletta da parte degli amminoacidi aromatici



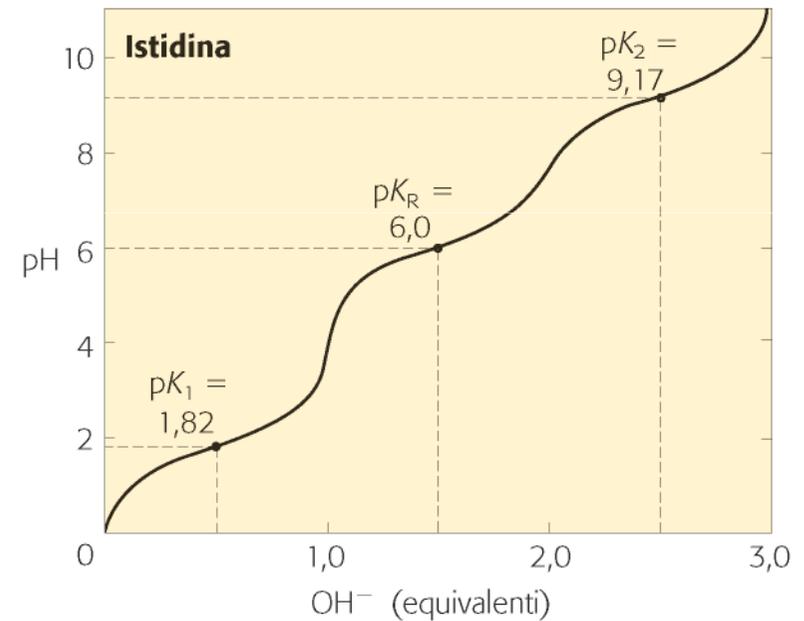
3.10 – Titolazione di un amminoacido



3.12 – Curve di titolazione (a) del glutammato e (b) dell'istidina



(a)

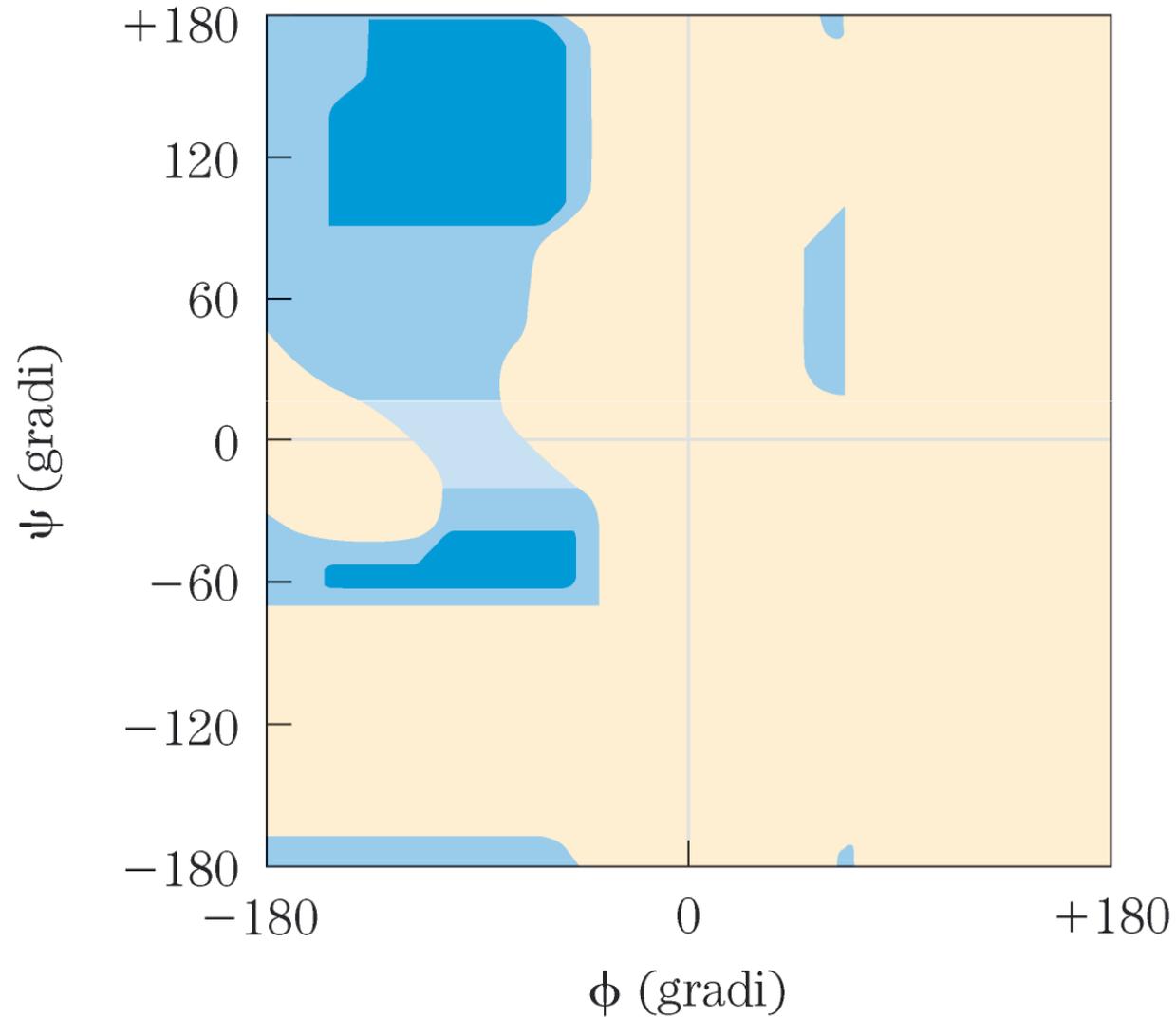


(b)

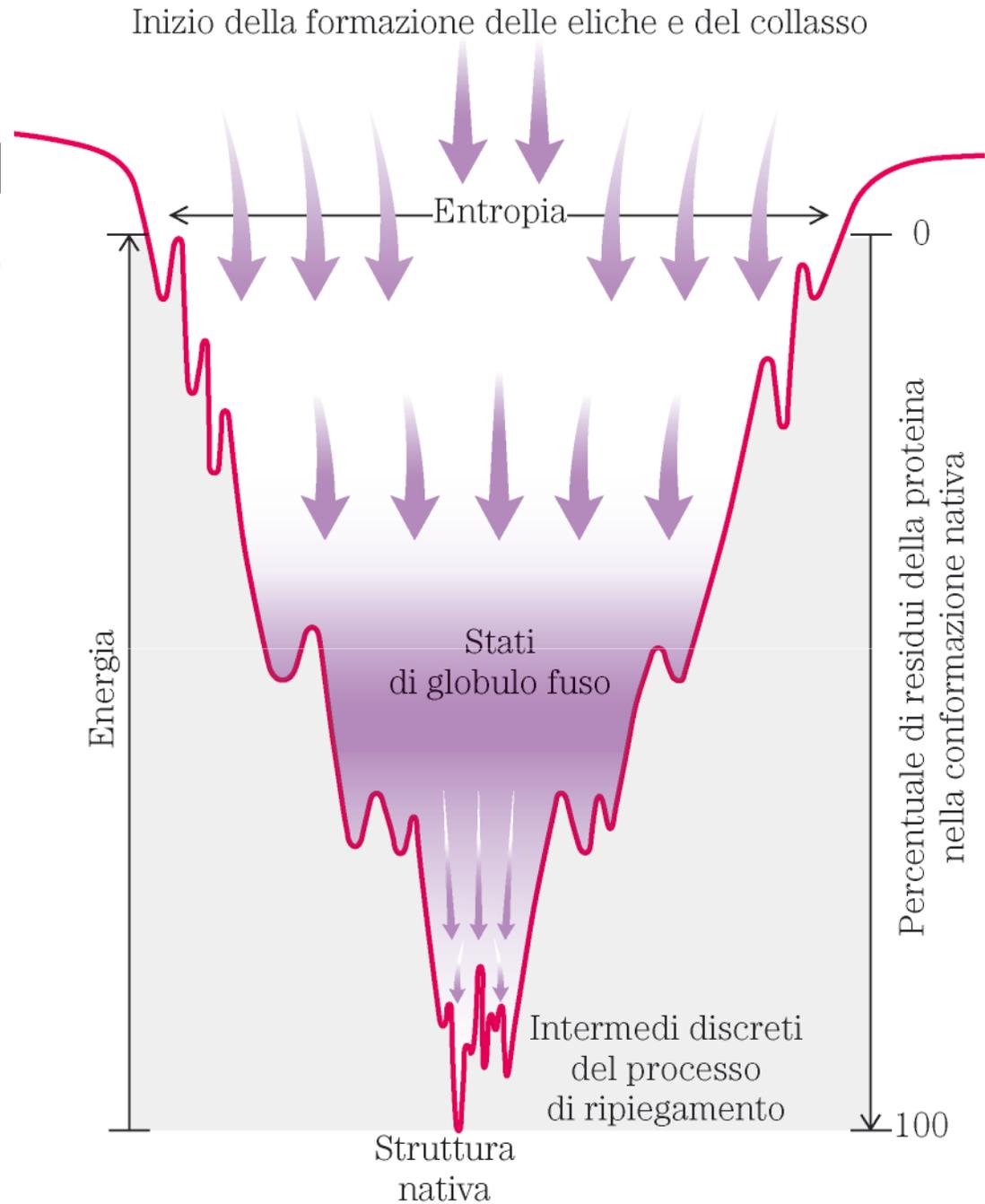
Capitolo 4:

La struttura tridimensionale delle proteine

4.3 – Un grafico di Ramachandran per residui di L-alanina



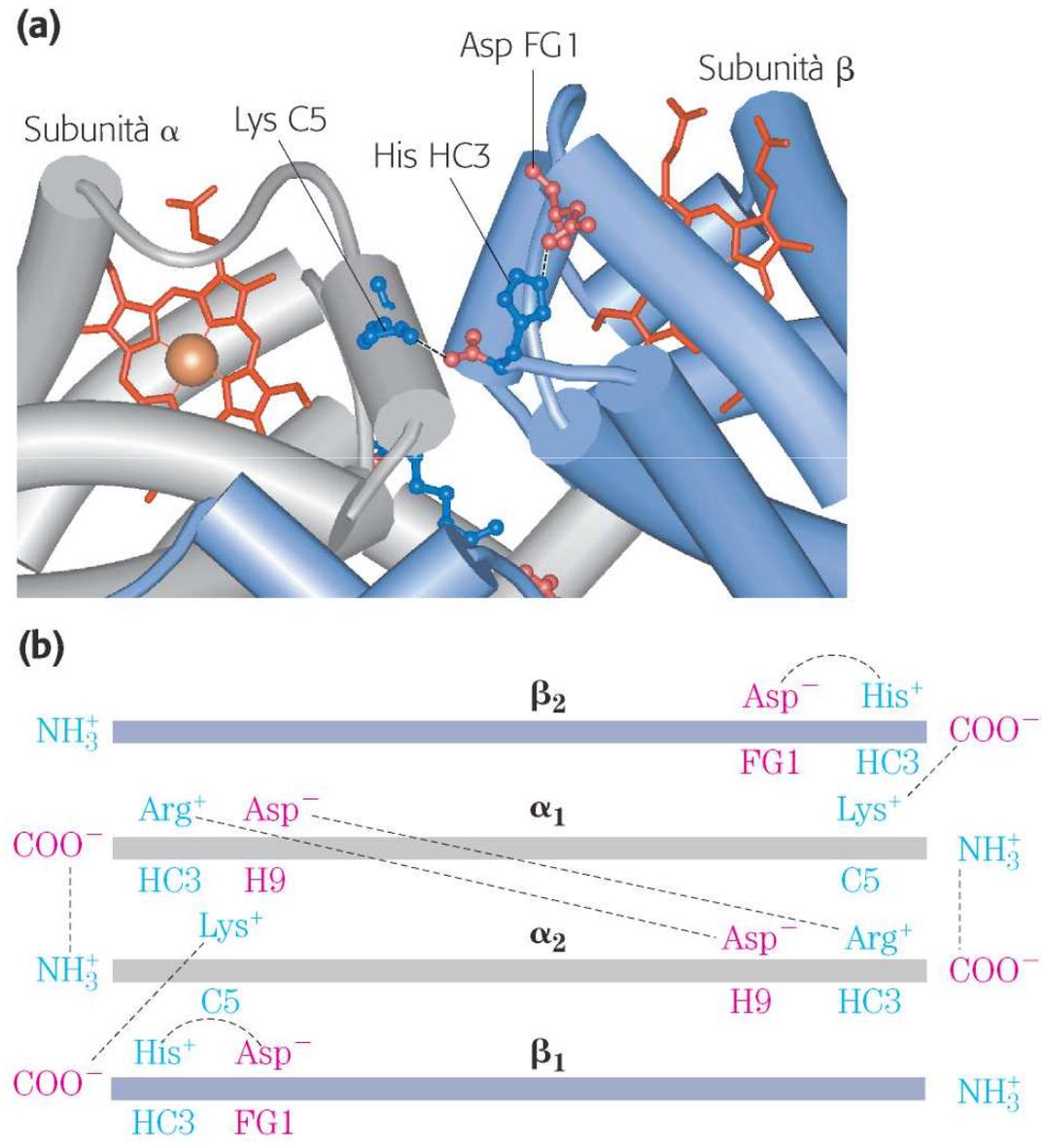
4.28 – Termodinamica del ripiegamento delle proteine visto come un imbuto di energia libera

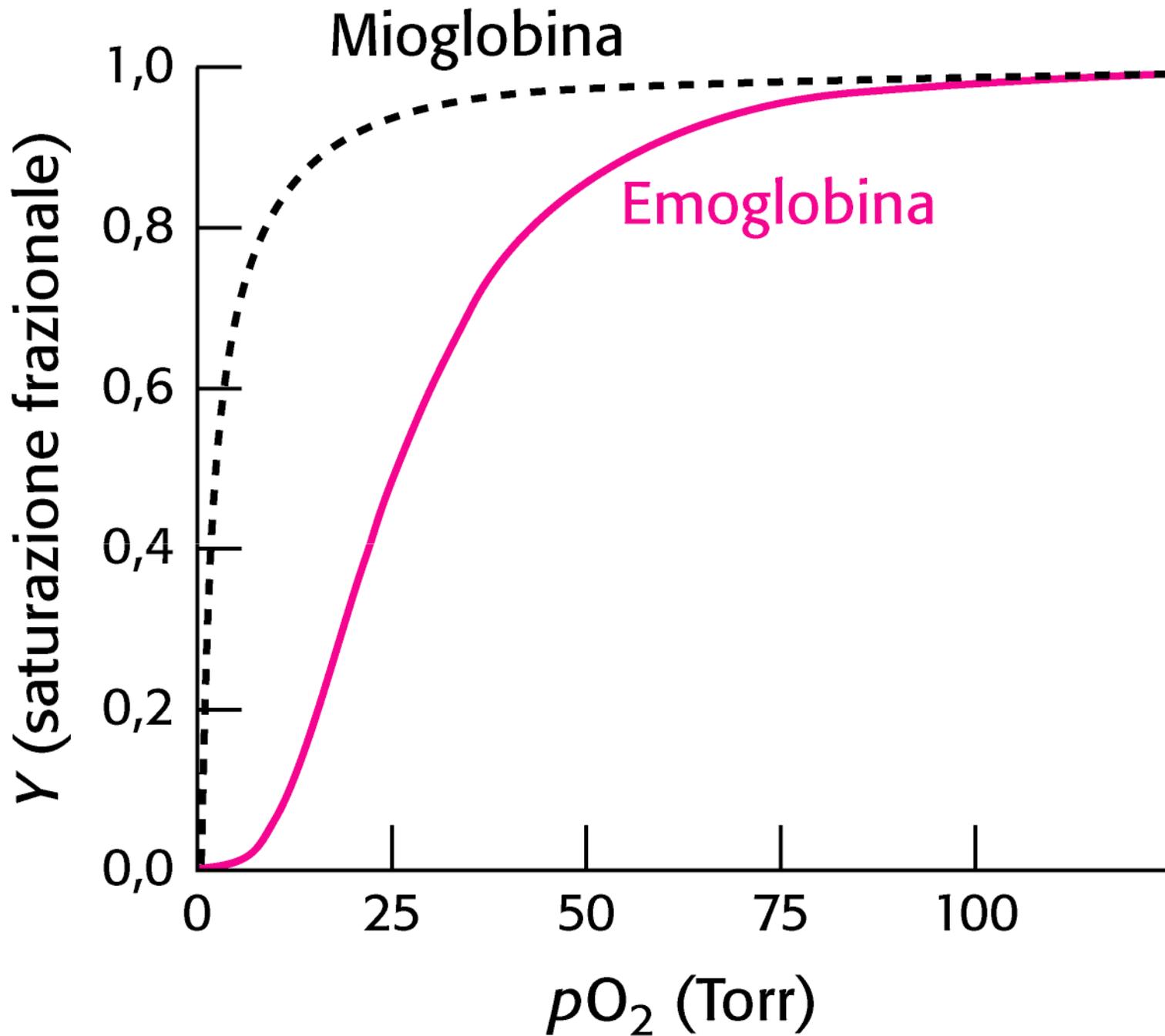


Capitolo 5:

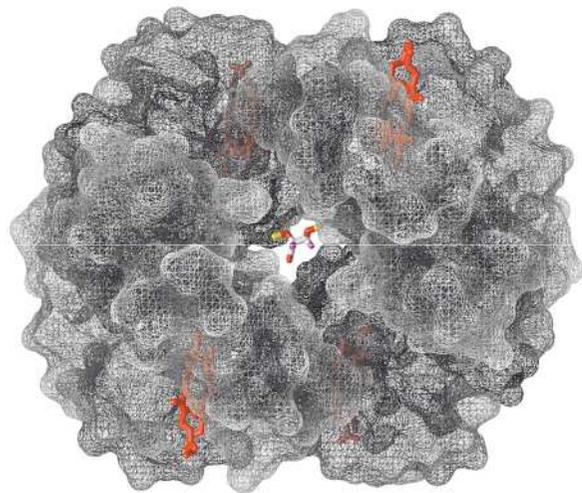
Funzioni delle proteine

5.9 – Ponti salini che stabilizzano lo stato T della deossiemoglobina



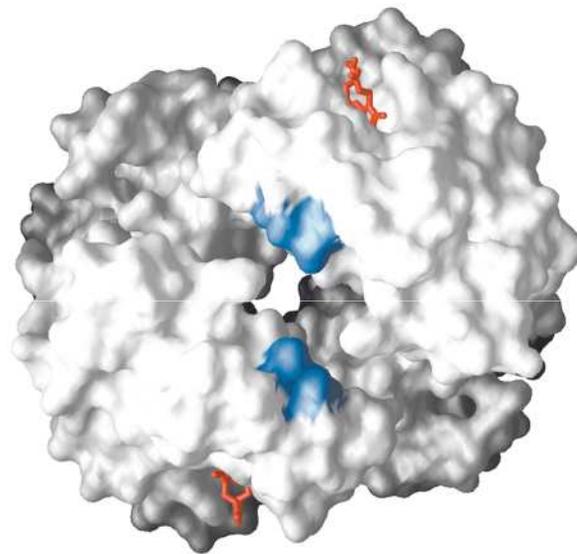


+ 2,3BPG (STATO T)

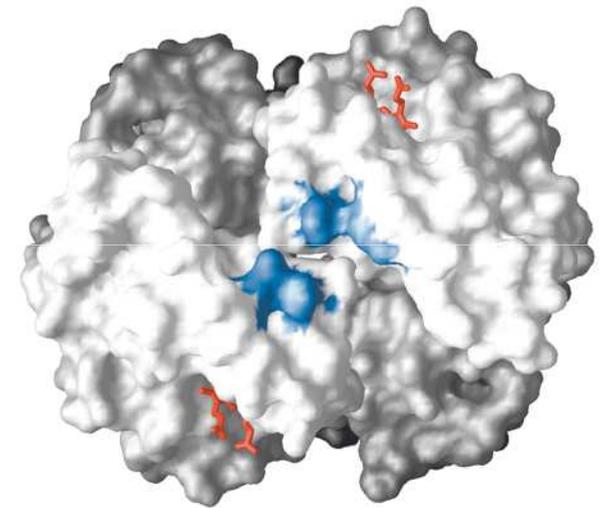


(a)

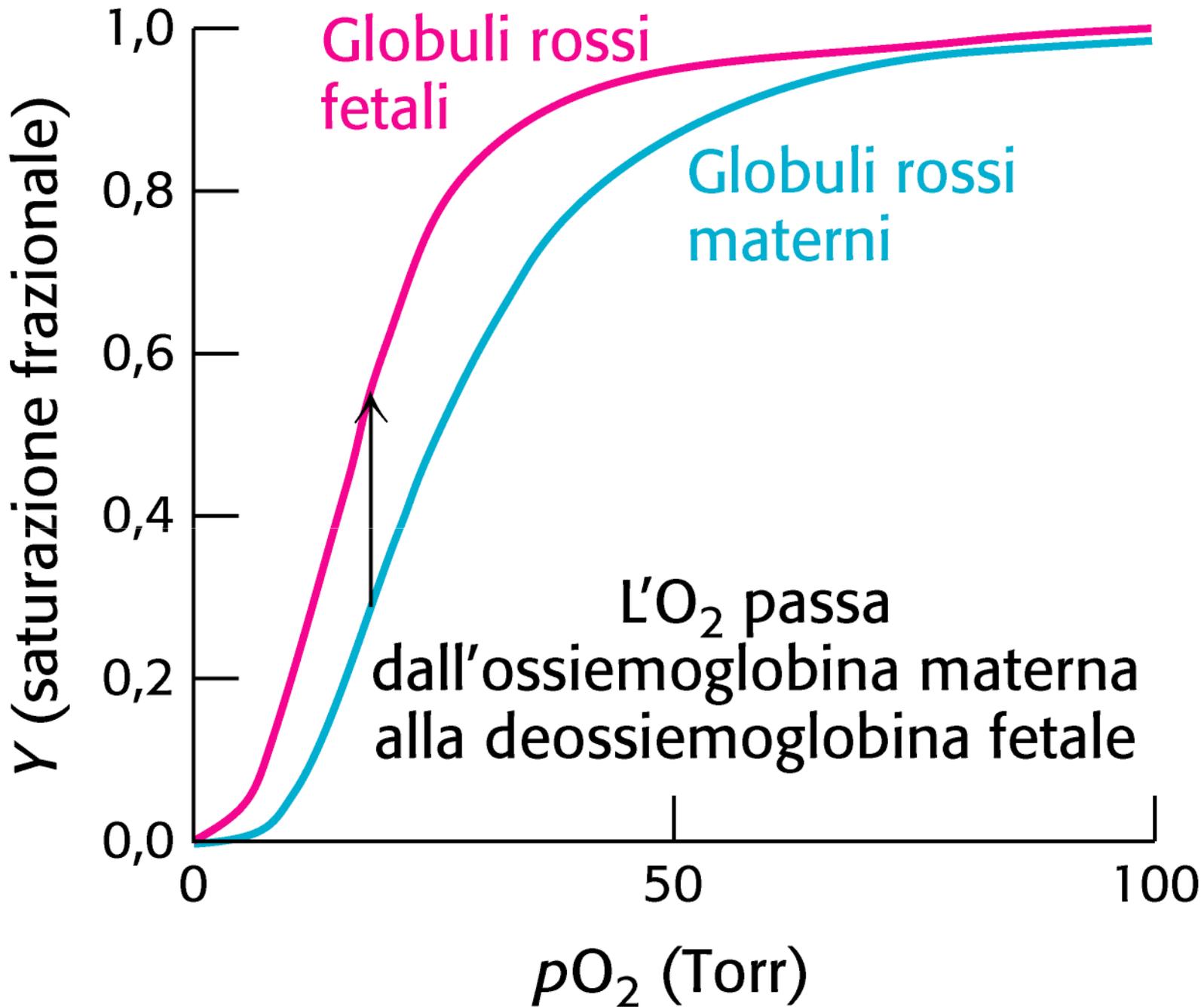
- 2,3BPG STATO R



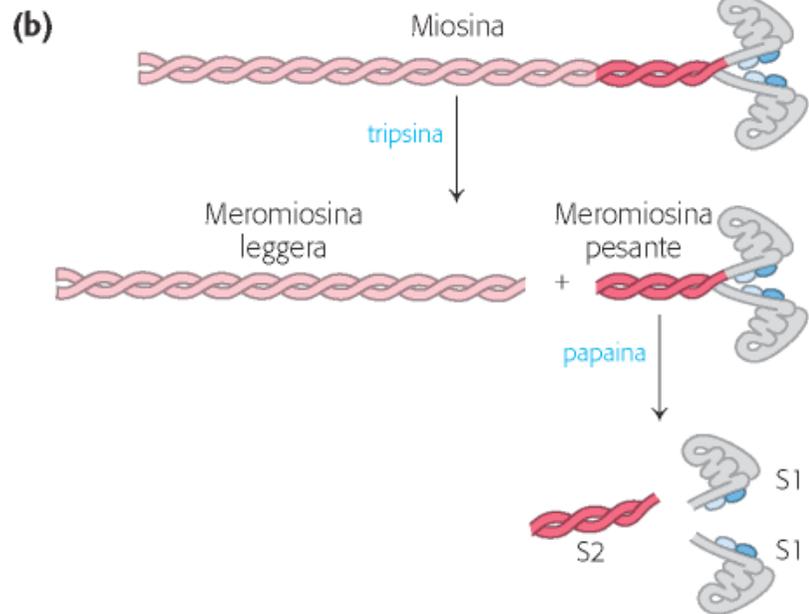
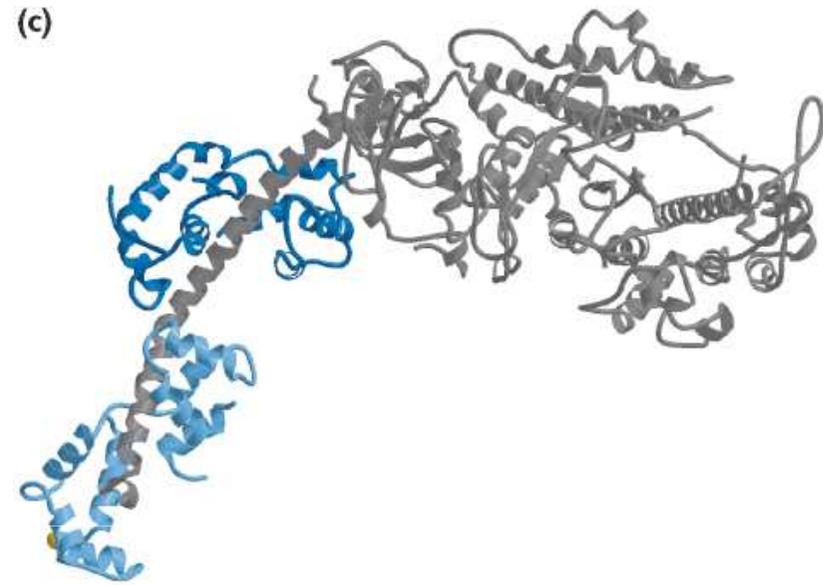
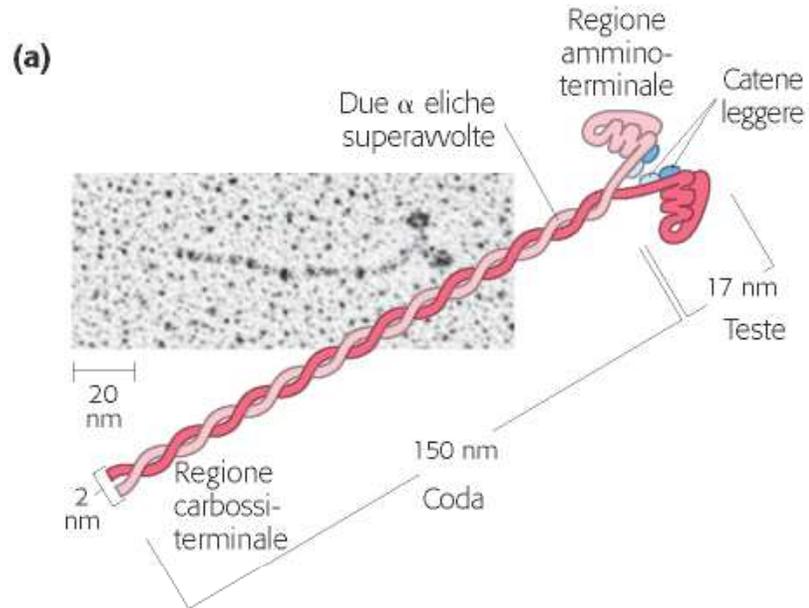
(b)



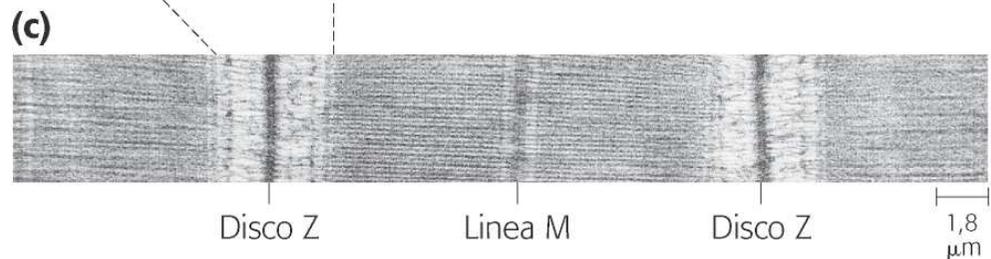
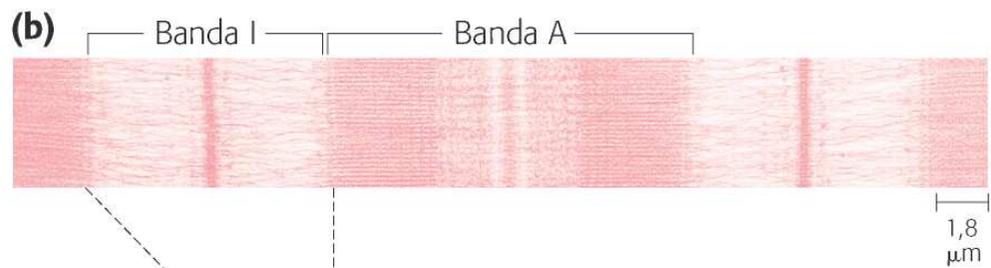
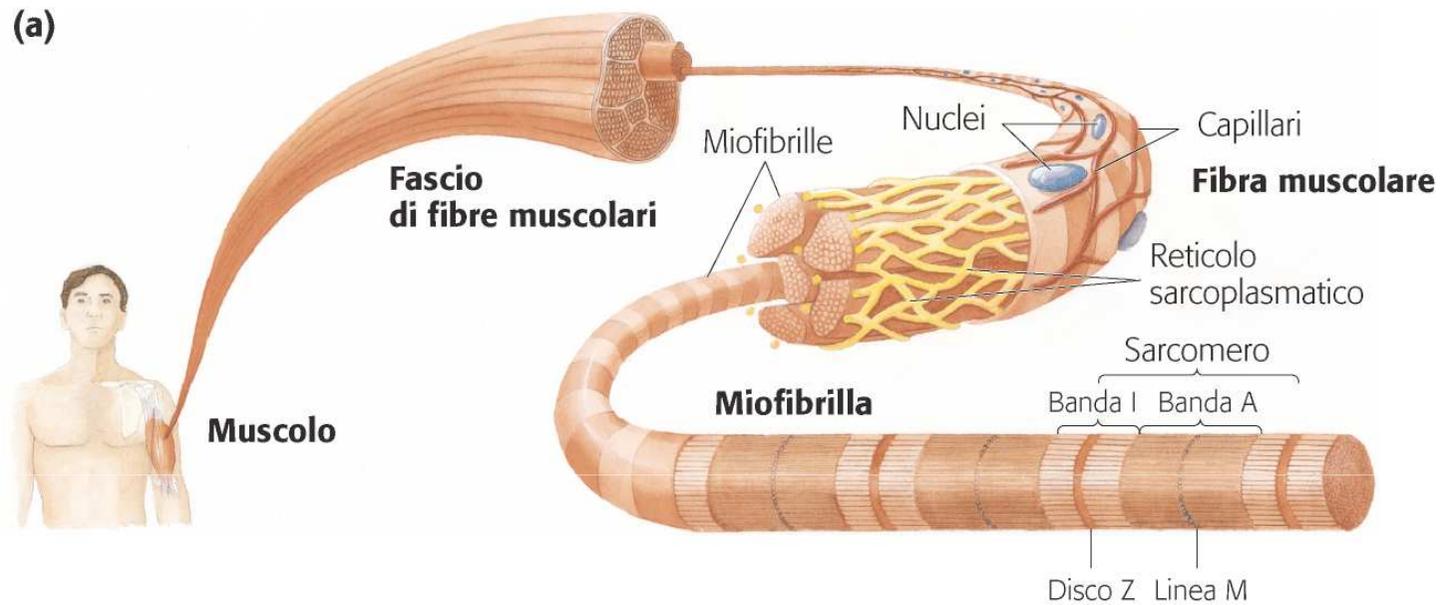
(c)



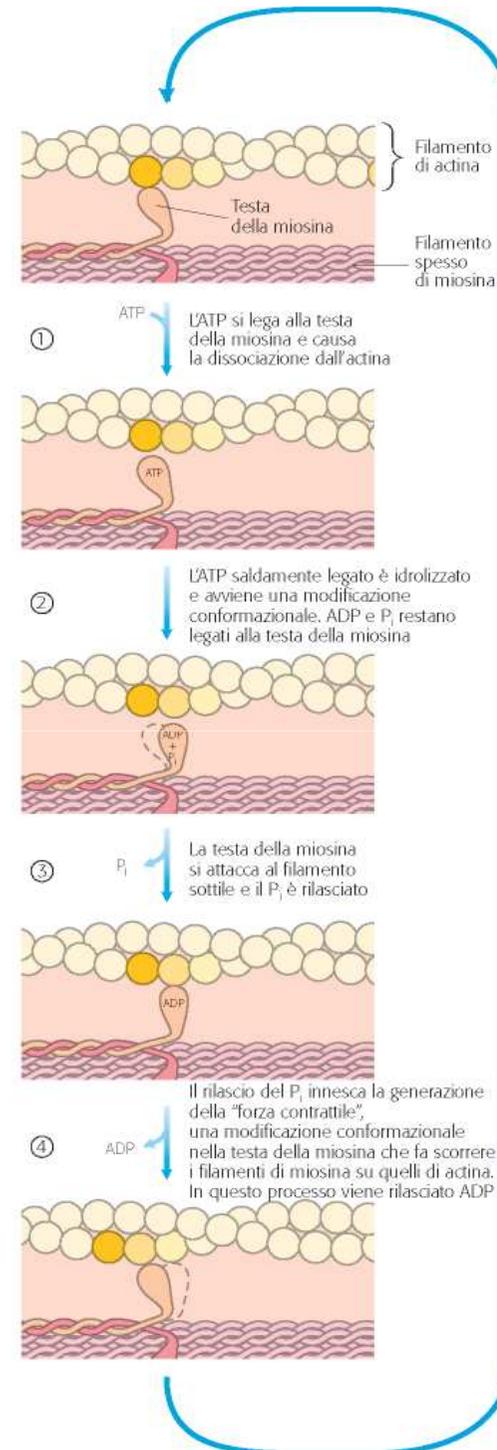
5.27 – La miosina



5.29 – Struttura del muscolo scheletrico



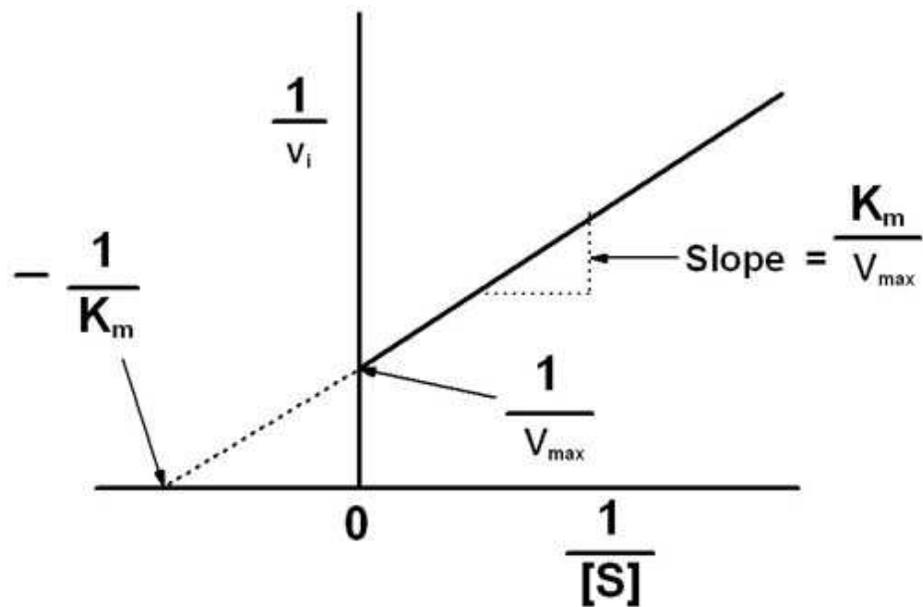
5.31 – Meccanismo molecolare della contrazione muscolare



Capitolo 6:

Gli enzimi

Immagine doppi reciproci (Figura 1 Box 6.1)

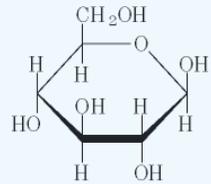


Capitolo 7:

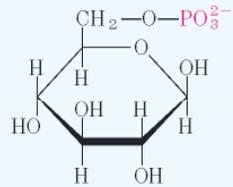
Carboidrati e glicobiologia

7.9 – Alcuni importanti derivati biologici degli esosi

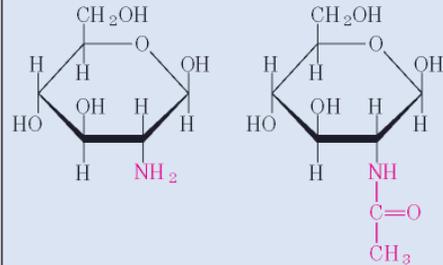
Famiglia del glucosio



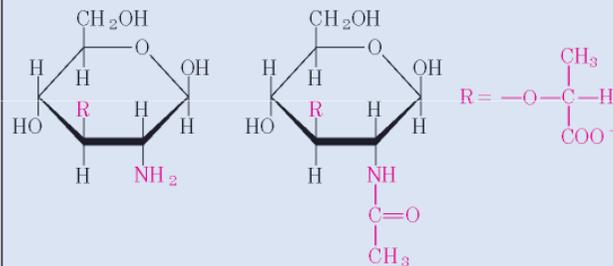
β -D-Glucosio



β -D-Glucosio 6-fosfato



β -D-Glucosammina *N*-Acetil- β -D-glucosammina



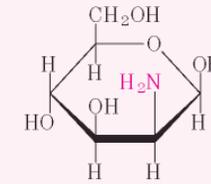
Acido muramico

Acido *N*-acetilmuramico

Amminozuccheri

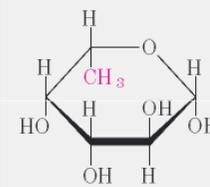


β -D-Galattosammina

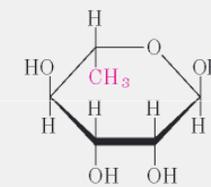


β -D-Mannosammina

Deossizuccheri

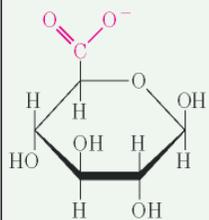


β -L-Fucosio

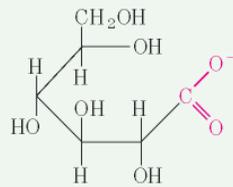


α -L-Ramosio

Zuccheri acidi



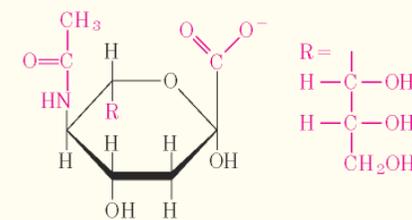
β -D-Glucuronato



D-Gluconato

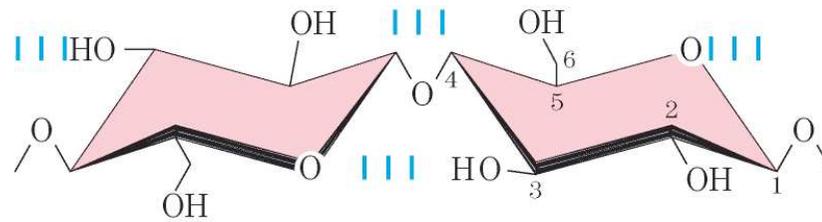


D-Glucono- δ -lattone



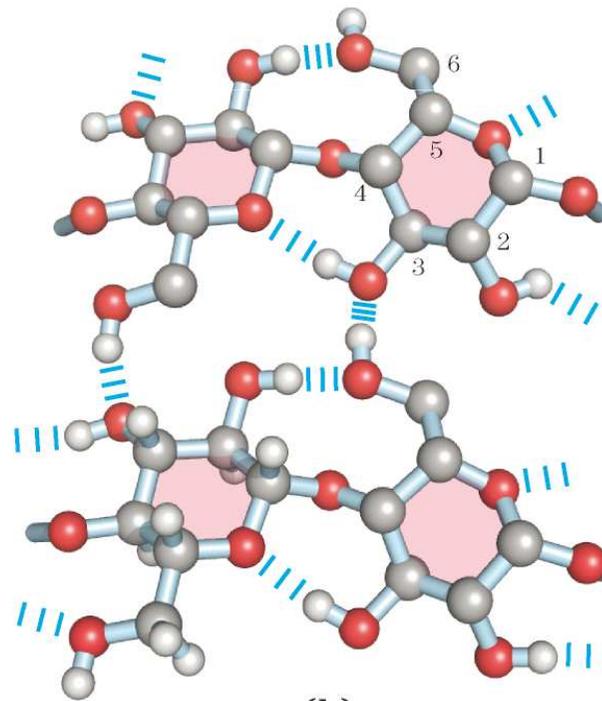
Acido *N*-acetilneuramminico
(acido sialico)

7.15 – Struttura della cellulosa



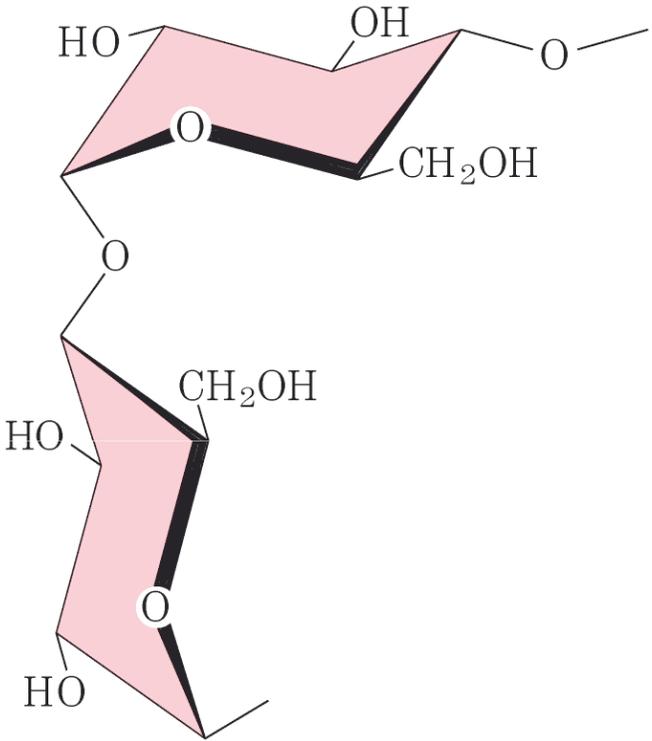
Unità di D-glucosio unite con legami (β 1 \rightarrow 4)

(a)



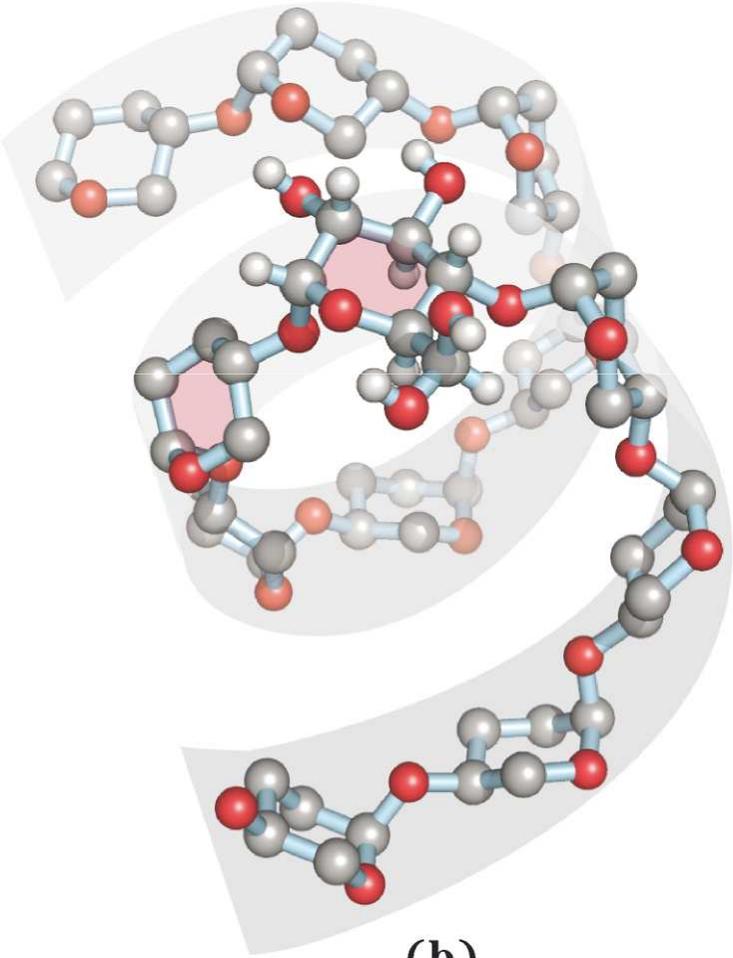
(b)

7.20 – Struttura dell'amilosio (la studentessa ha indicato la 7.21)



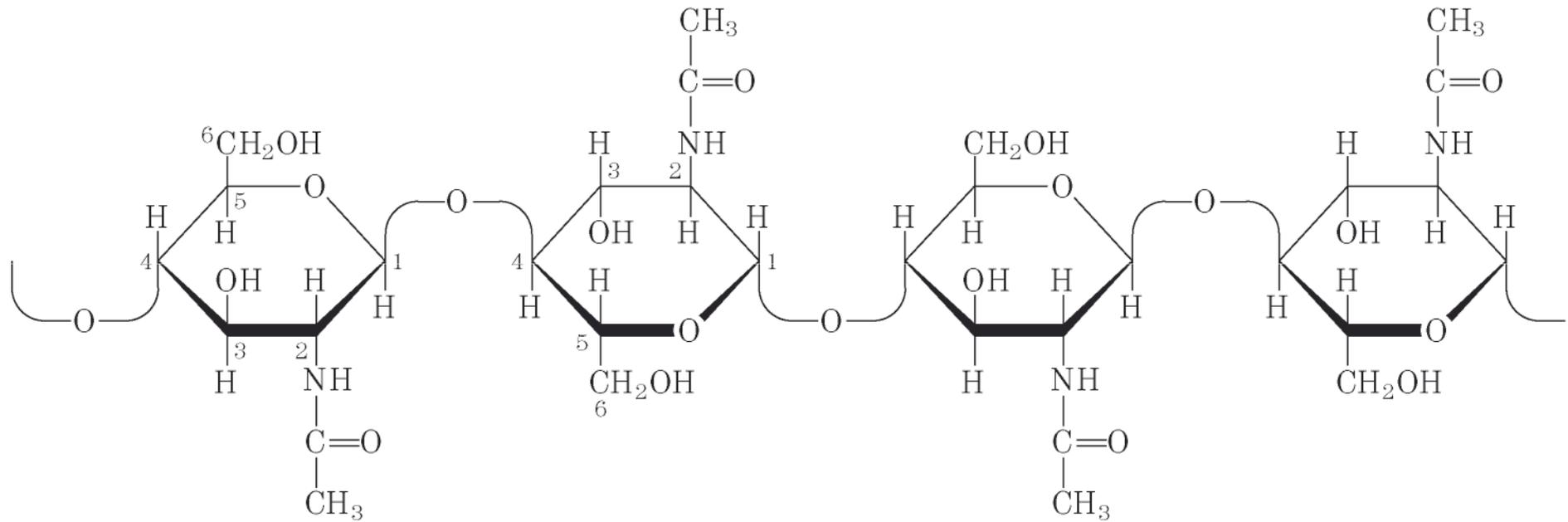
Unità di D-glucosio unite con legami ($\alpha 1 \rightarrow 4$)

(a)

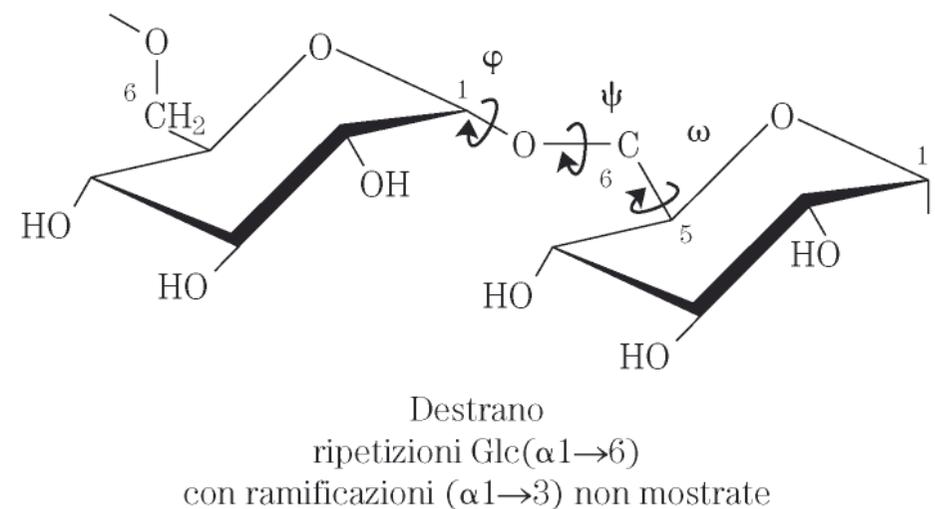
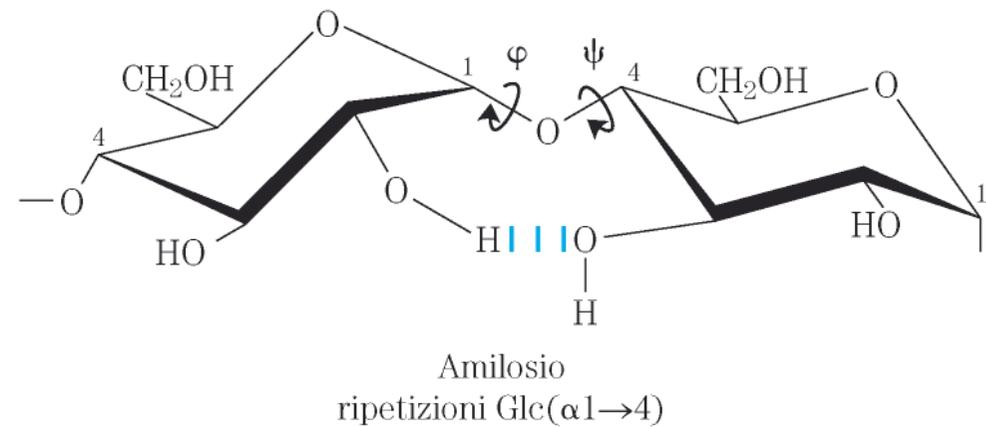
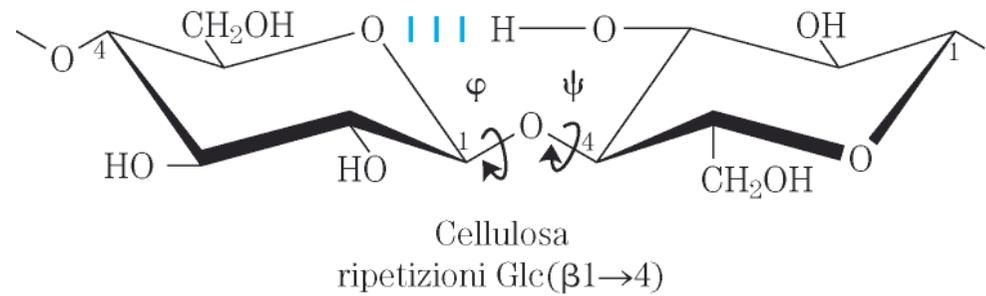


(b)

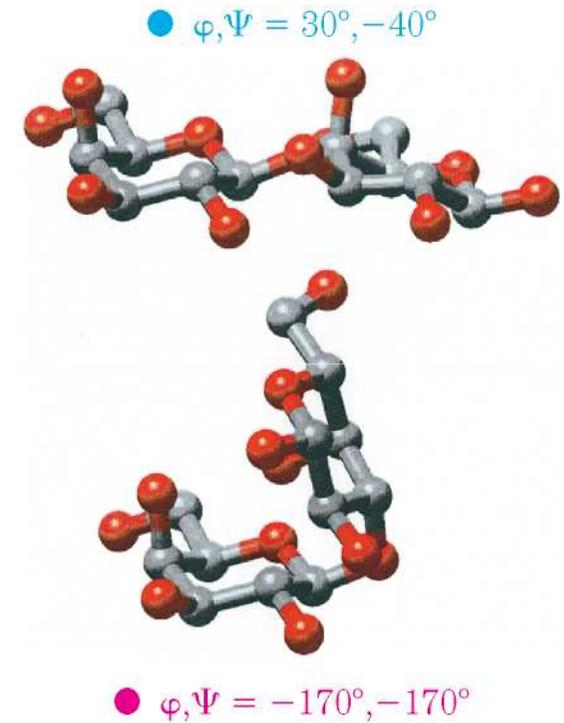
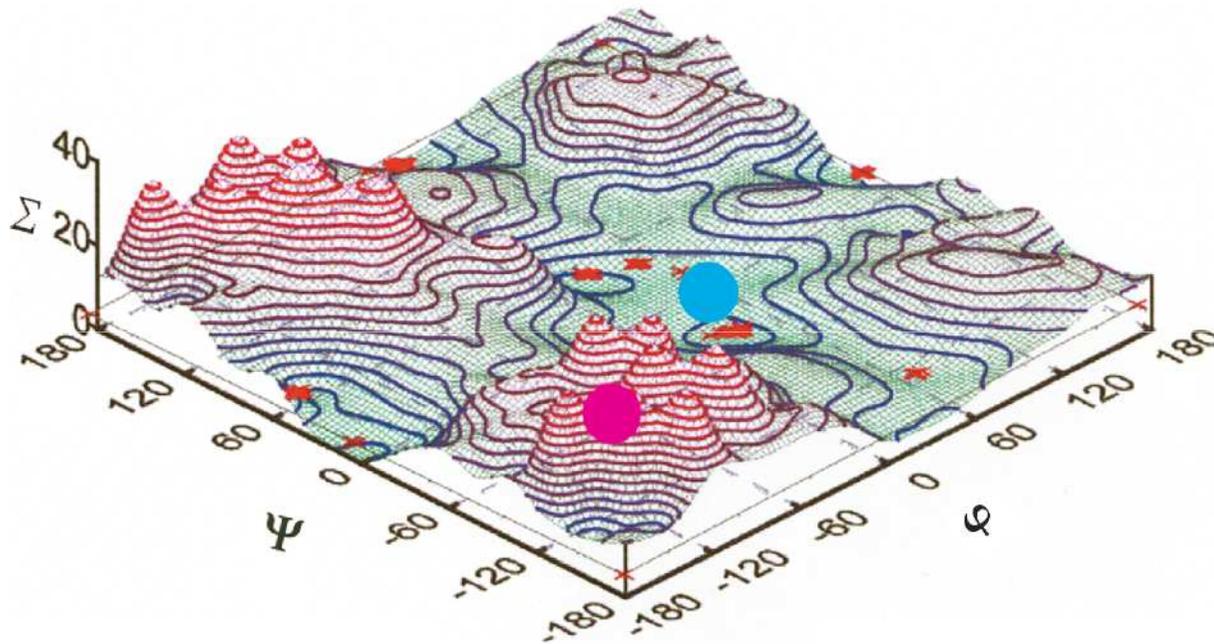
7.17 – Chitina (la studentessa ha indicato la 7.18)



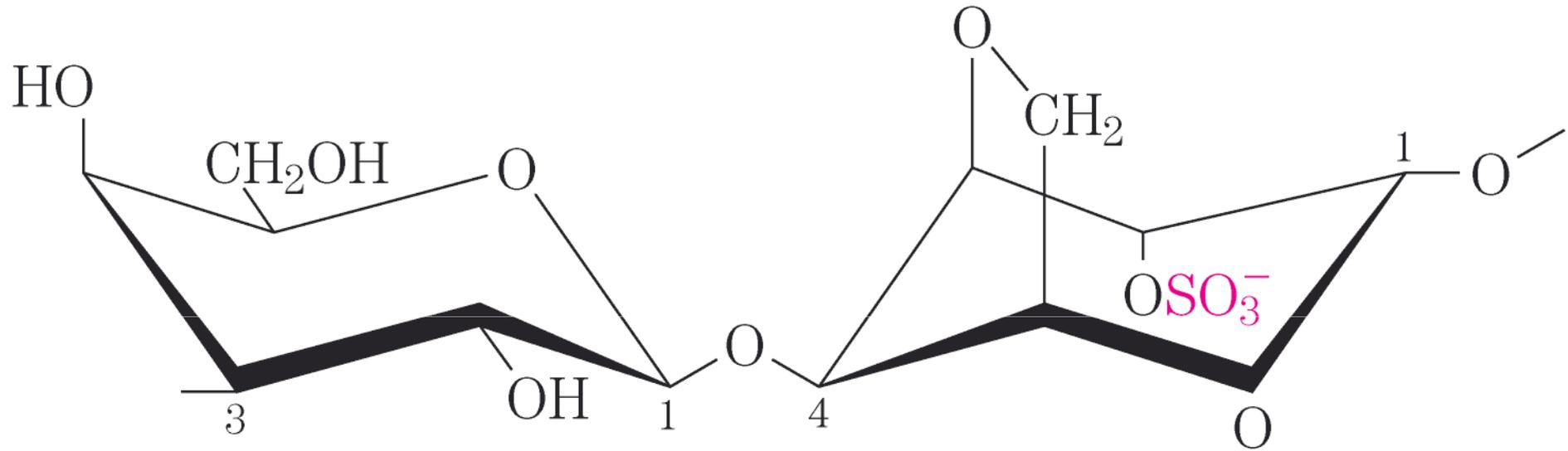
7.18 – Conformazione a livello dei legami glicosidici di cellulosa, amilosio e destrano (la studentessa ha indicato la 7.19)



7.19 – Mappa delle conformazioni favorite negli oligosaccaridi e nei polisaccaridi (la studentessa ha indicato la 7.20)



7.21 – La struttura dell'agarosio (la studentessa ha indicato la 7.23)

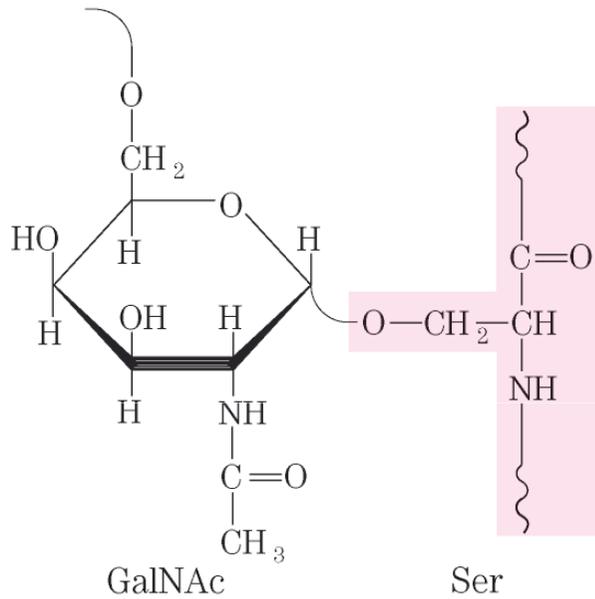


Agarosio

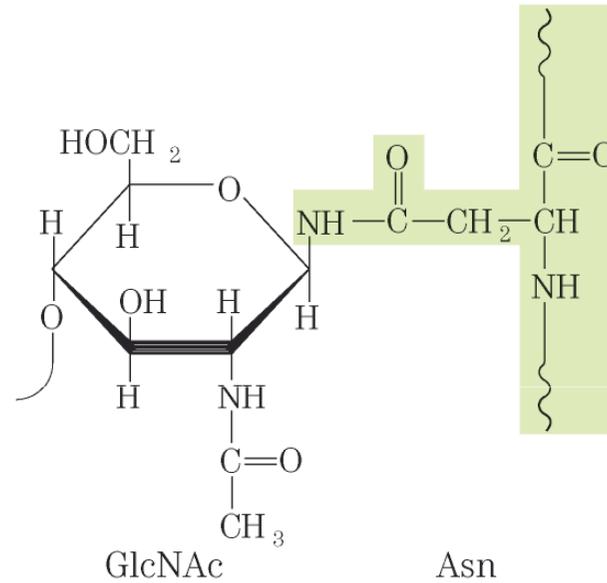
ripetizioni 3)D-Gal(β 1 \rightarrow 4)3,6-anidro-L-Gal^{2S}(α 1

7.29 – Legami oligosaccaridici nelle glicoproteine (la studentessa ha indicato la 7.31)

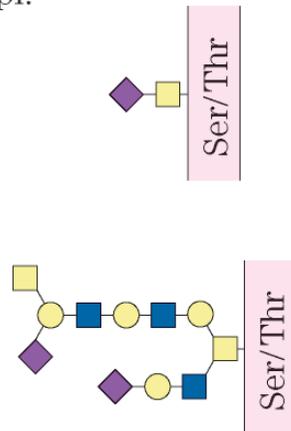
(a) Legame O-glicosidico



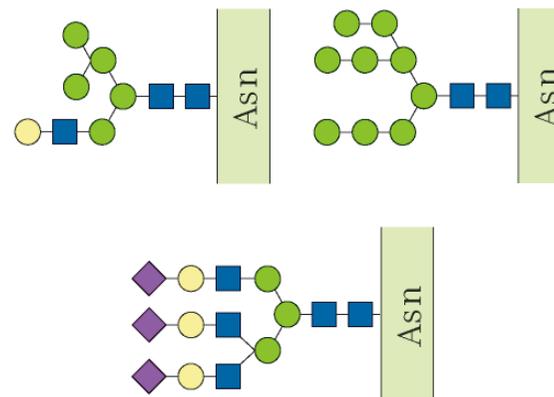
(b) Legame N-glicosidico



Esempi:

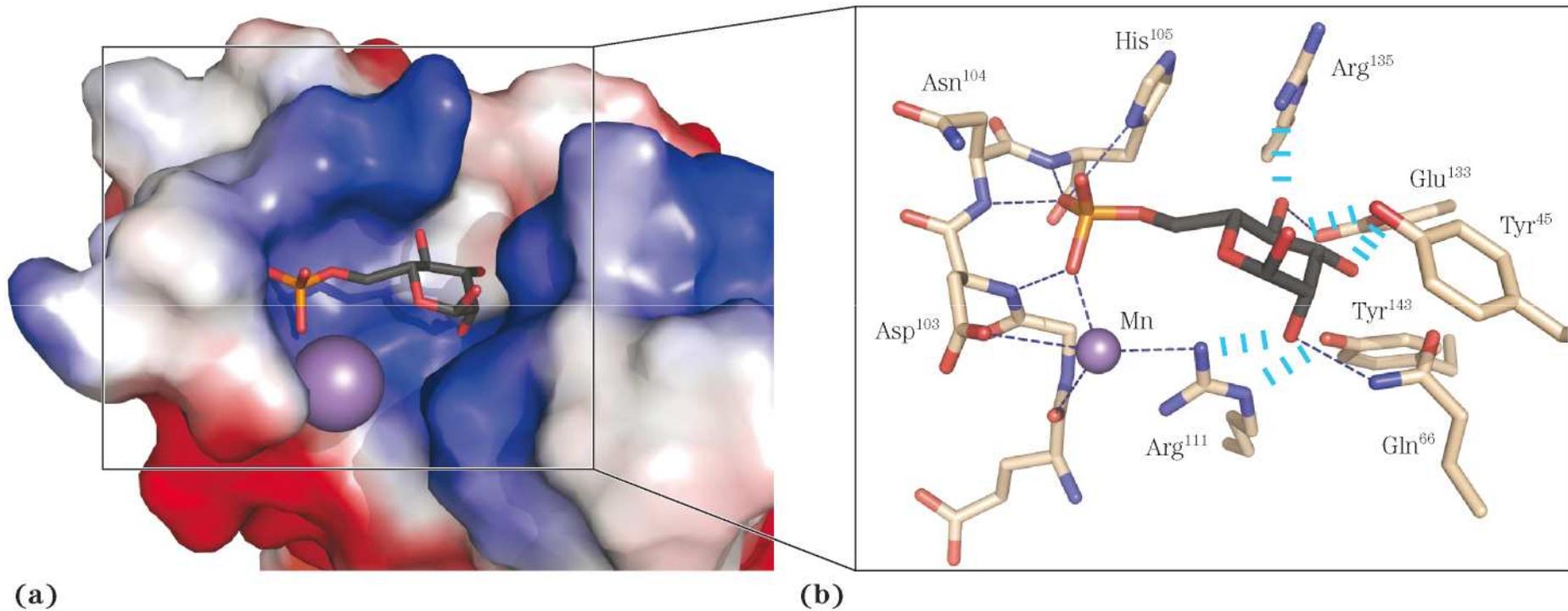


Esempi:

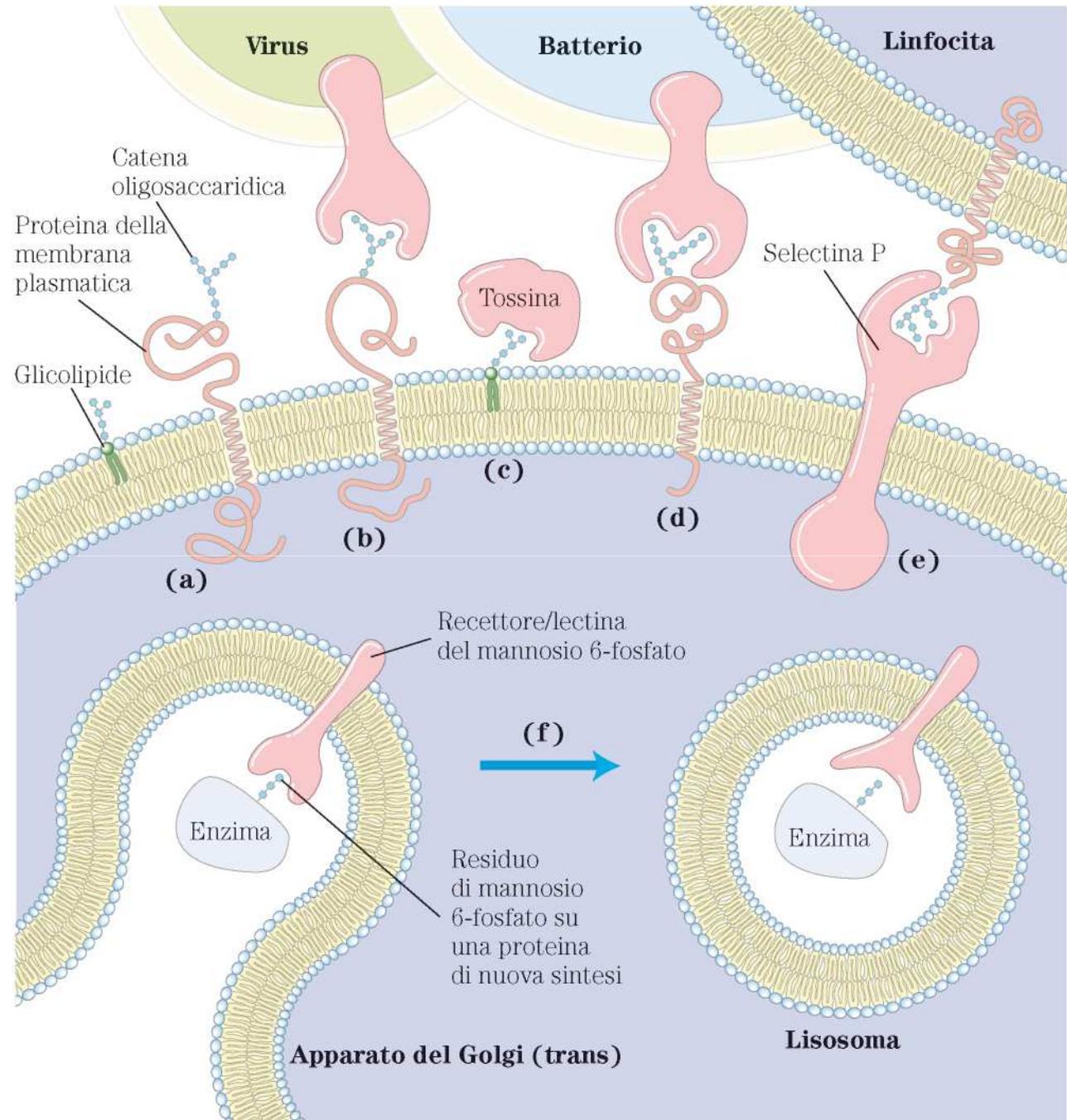


- GlcNAc
- Man
- Gal
- ◆ Neu5Ac
- GalNAc

7.33 – Dettagli dell'interazione lectina-carboidrato (la studentessa ha indicato la 7.35)



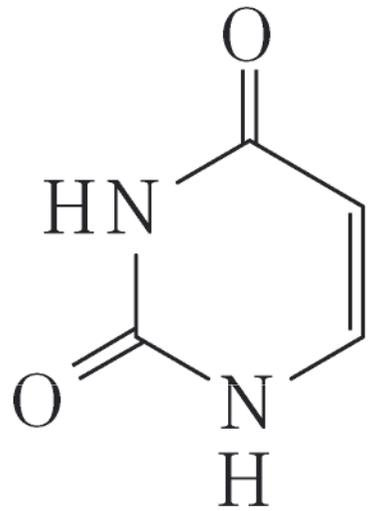
7.35 – Ruolo degli oligosaccaridi nel riconoscimento e nell'adesione a superfici cellulari (la studentessa ha indicato la 7.37)



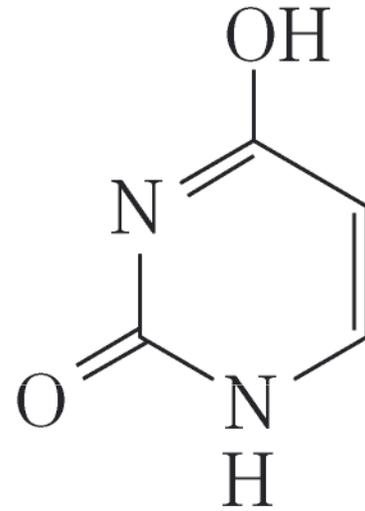
Capitolo 8:

Nucleotidi e acidi nucleici

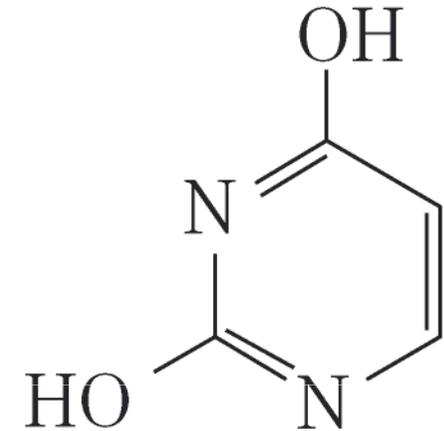
8.9 – Forme tautomeriche dell'uracile



Lattame



Lattime



Doppio lattime

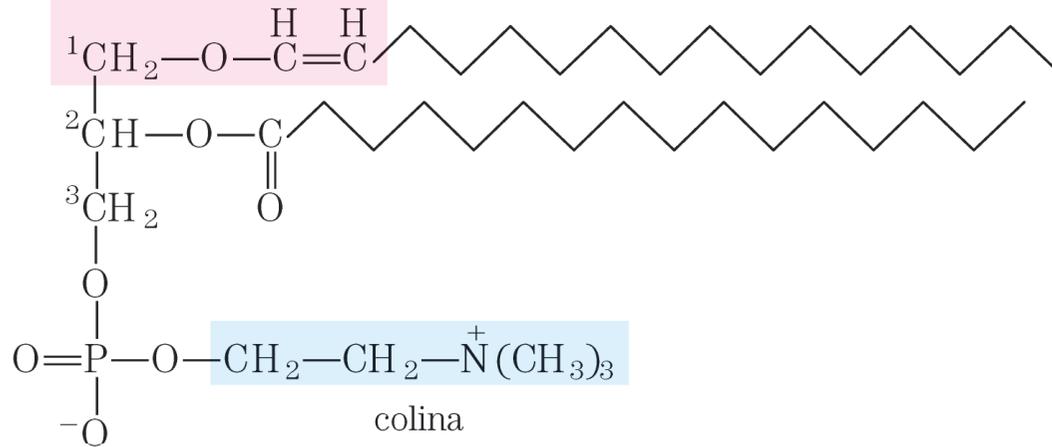
Uracile

Capitolo 10:

I lipidi

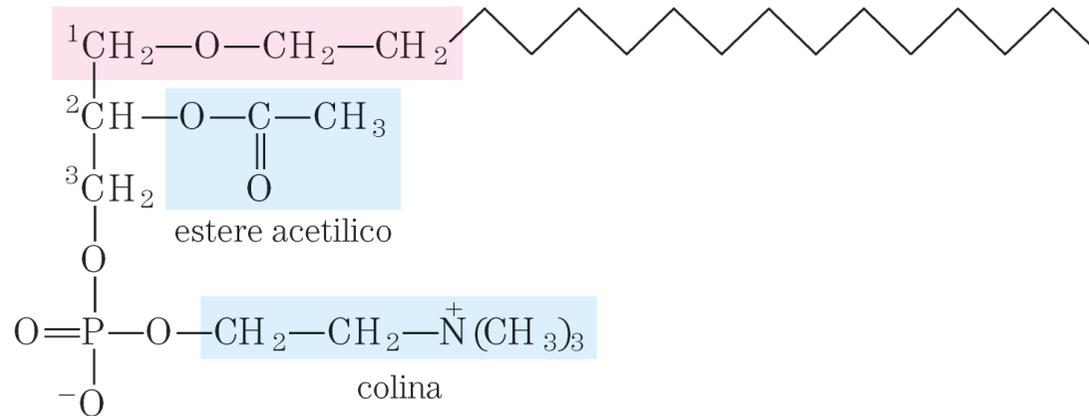
10.10 – I lipidi-etero (la studentessa ha indicato la 10.9)

alchene unito
con legame etere



Plasmalogeno

alcano unito con legame etere

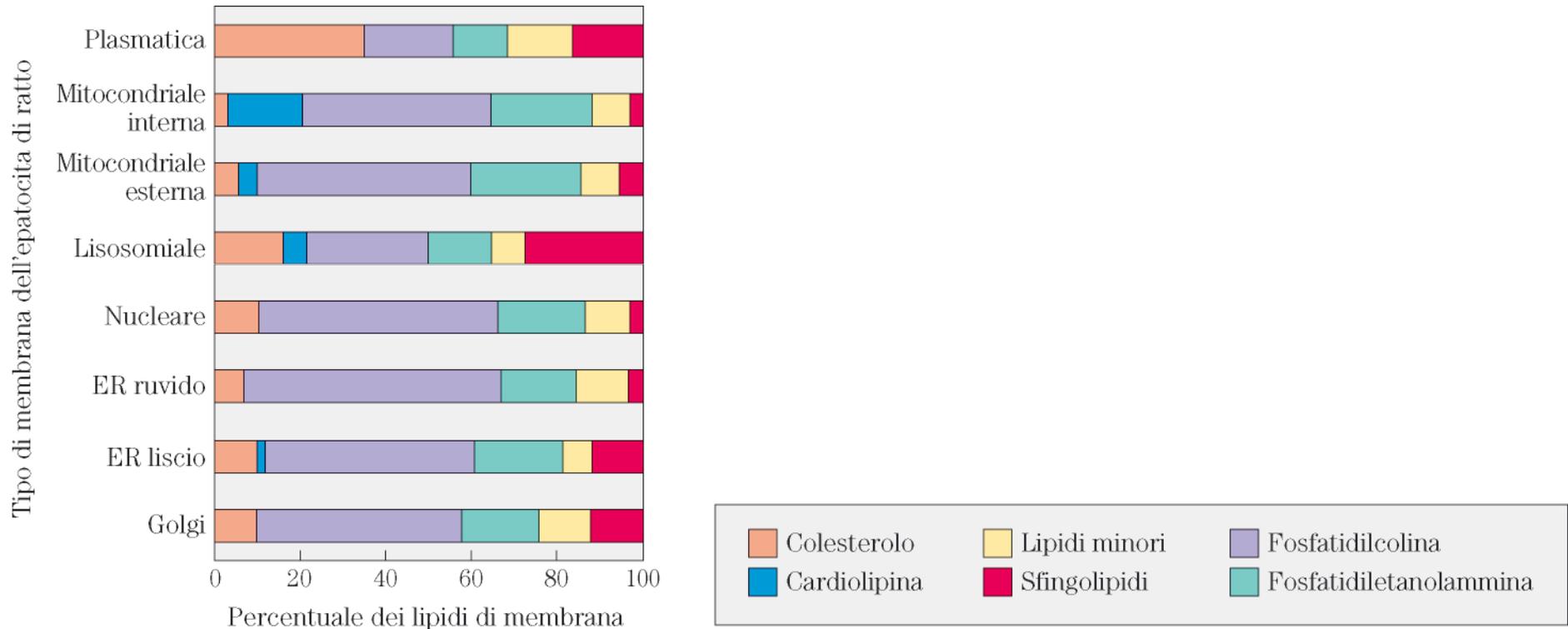


Fattore che attiva le piastrine

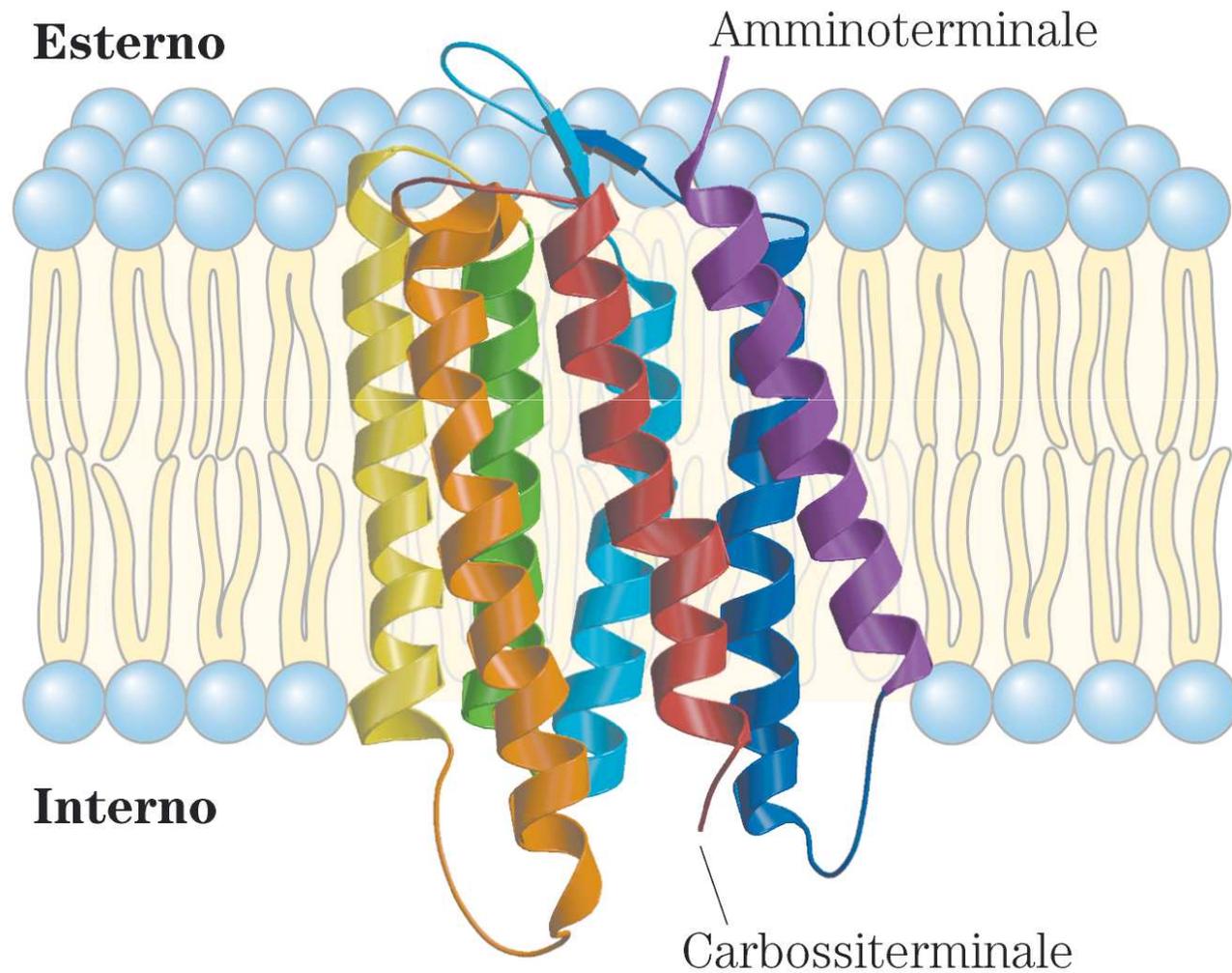
Capitolo 11:

Membrane biologiche e trasporto

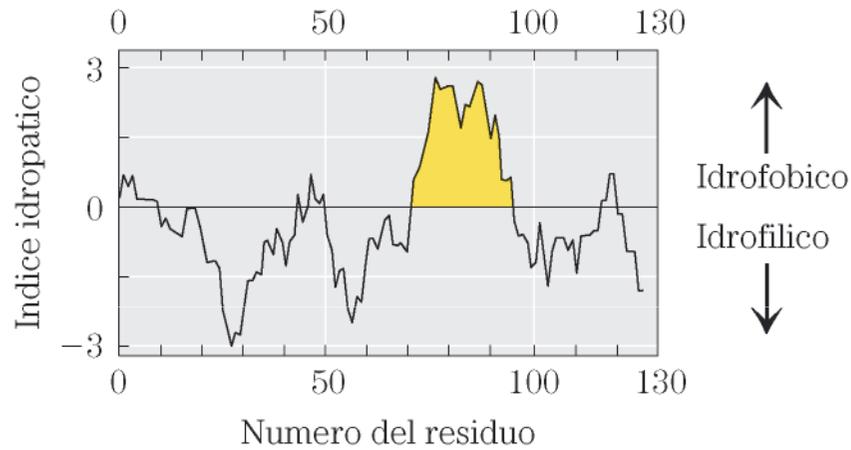
11.2 – Composizione lipidica della membrana plasmatica e delle membrane degli organelli di epatocita di ratto



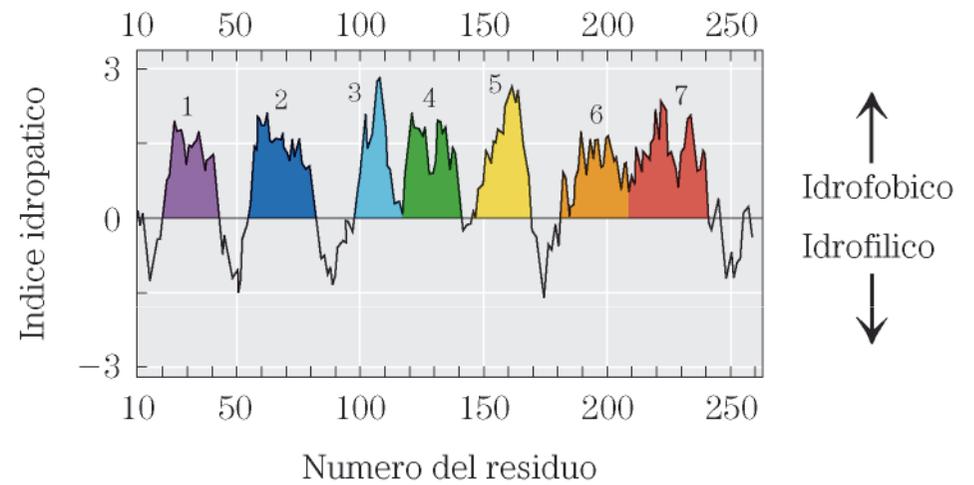
11.9 – La batteriorodopsina, una proteina che attraversa la membrana



11.11 – Grafici idropatici

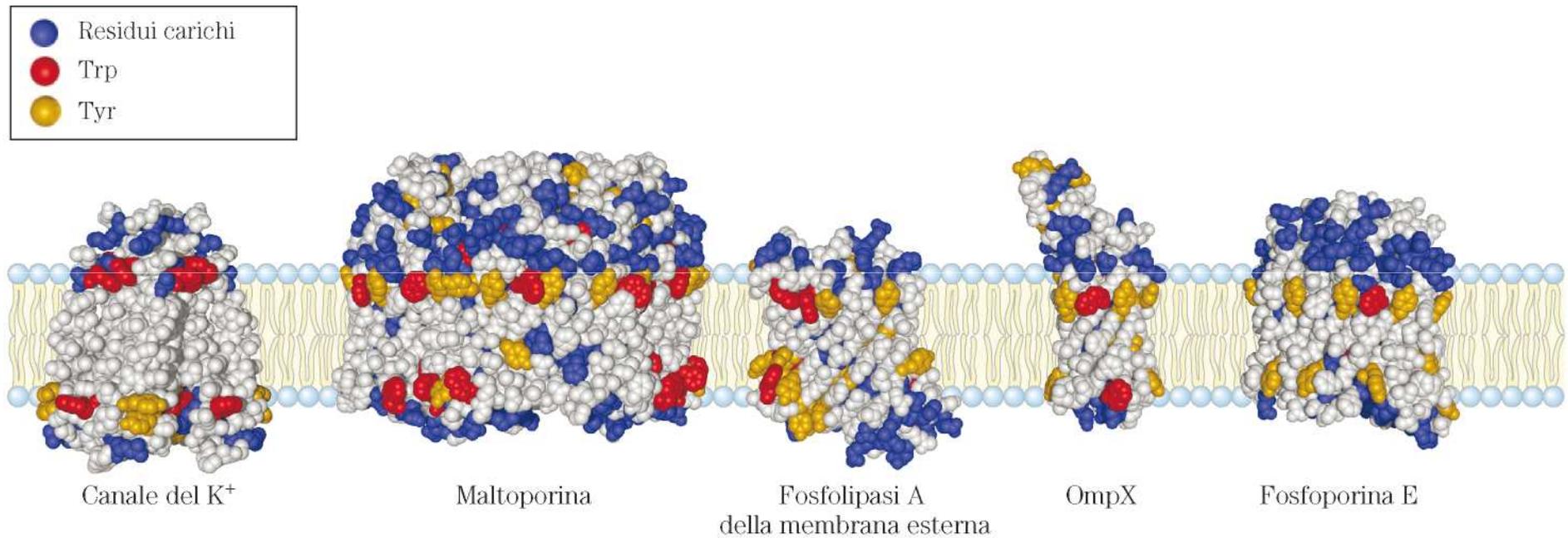


(a) Glicoforina

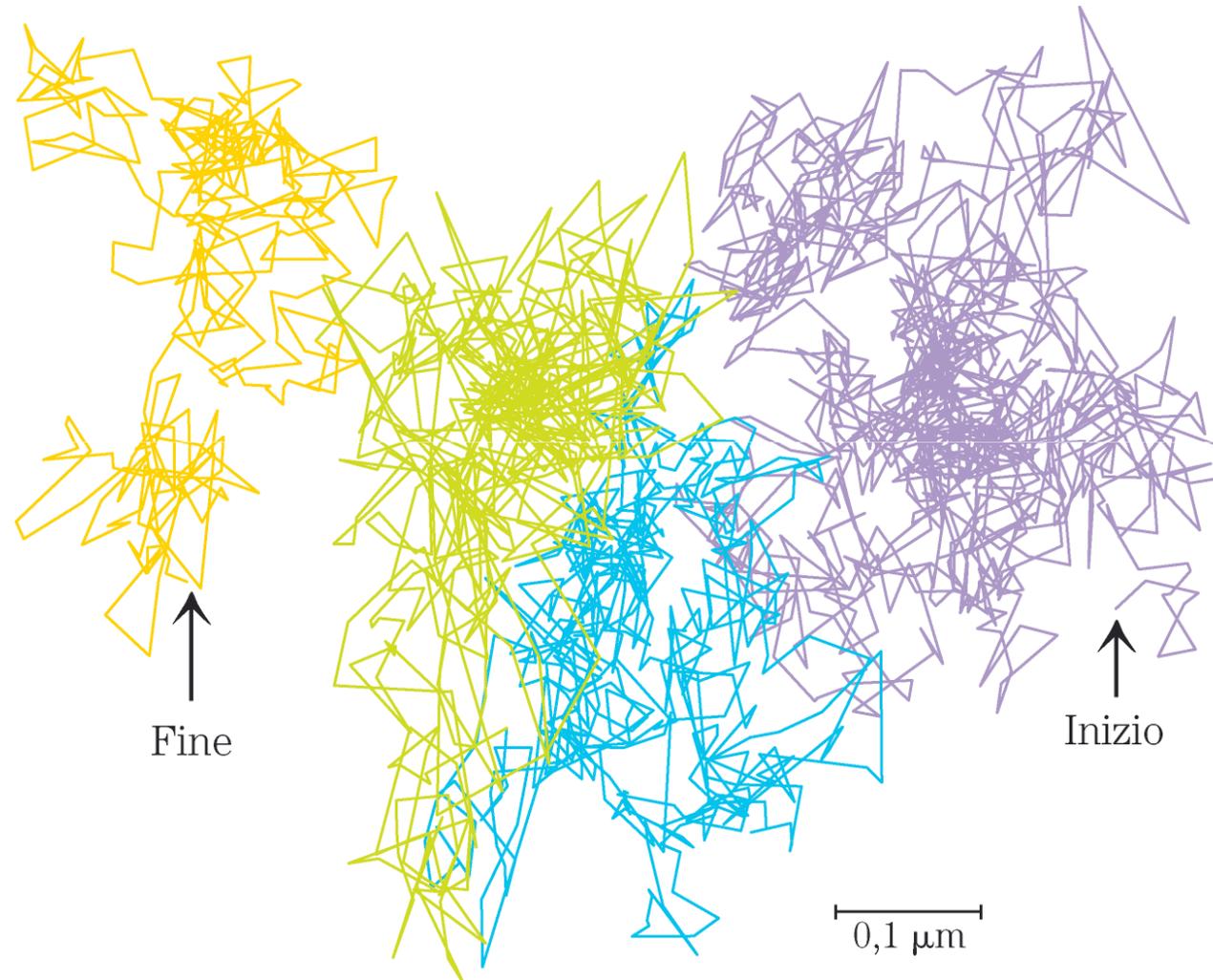


(b) Batteriorodopsina

11.12 – Residui di Tyr e Trp delle proteine di membrana si raggruppano all'interfaccia acqua-lipide



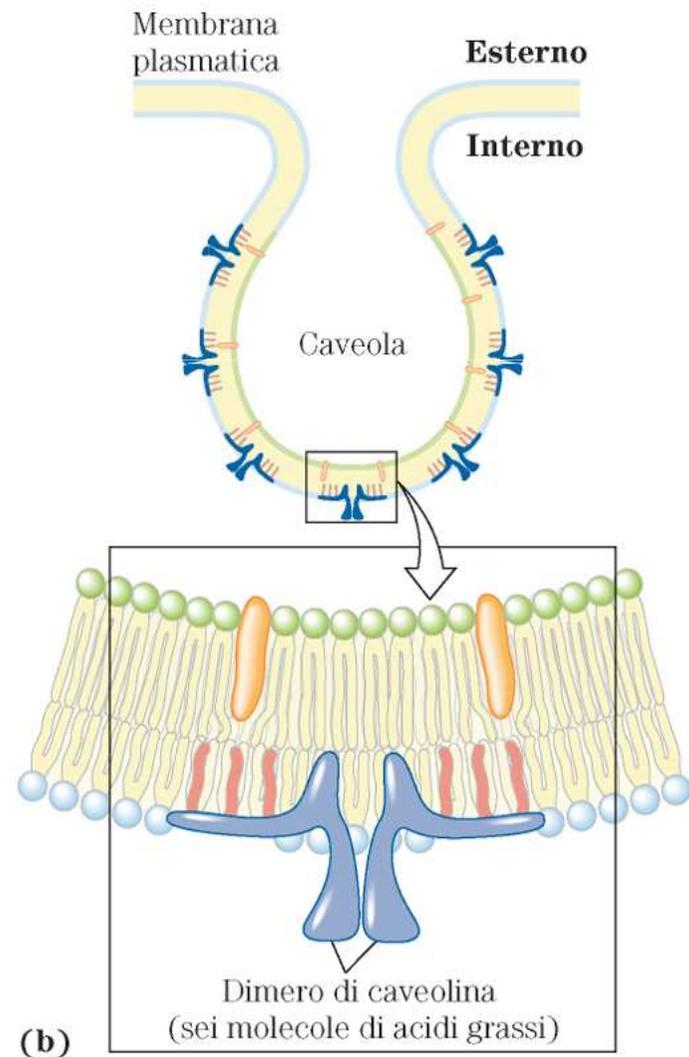
11.18 – Diffusione a salto di singole molecole lipidiche



11.21 – La caveolina forza verso l'interno la curvatura della membrana

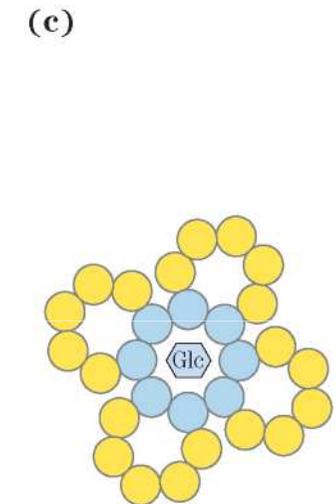
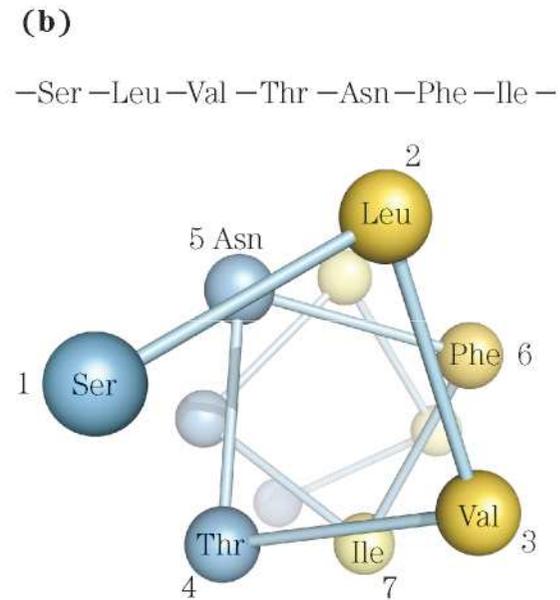
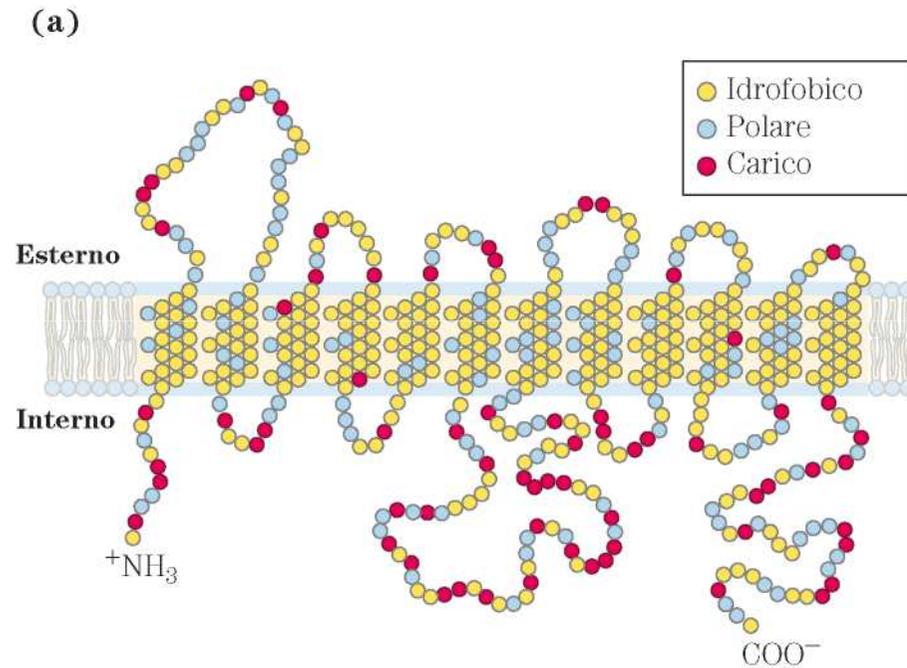


(a)

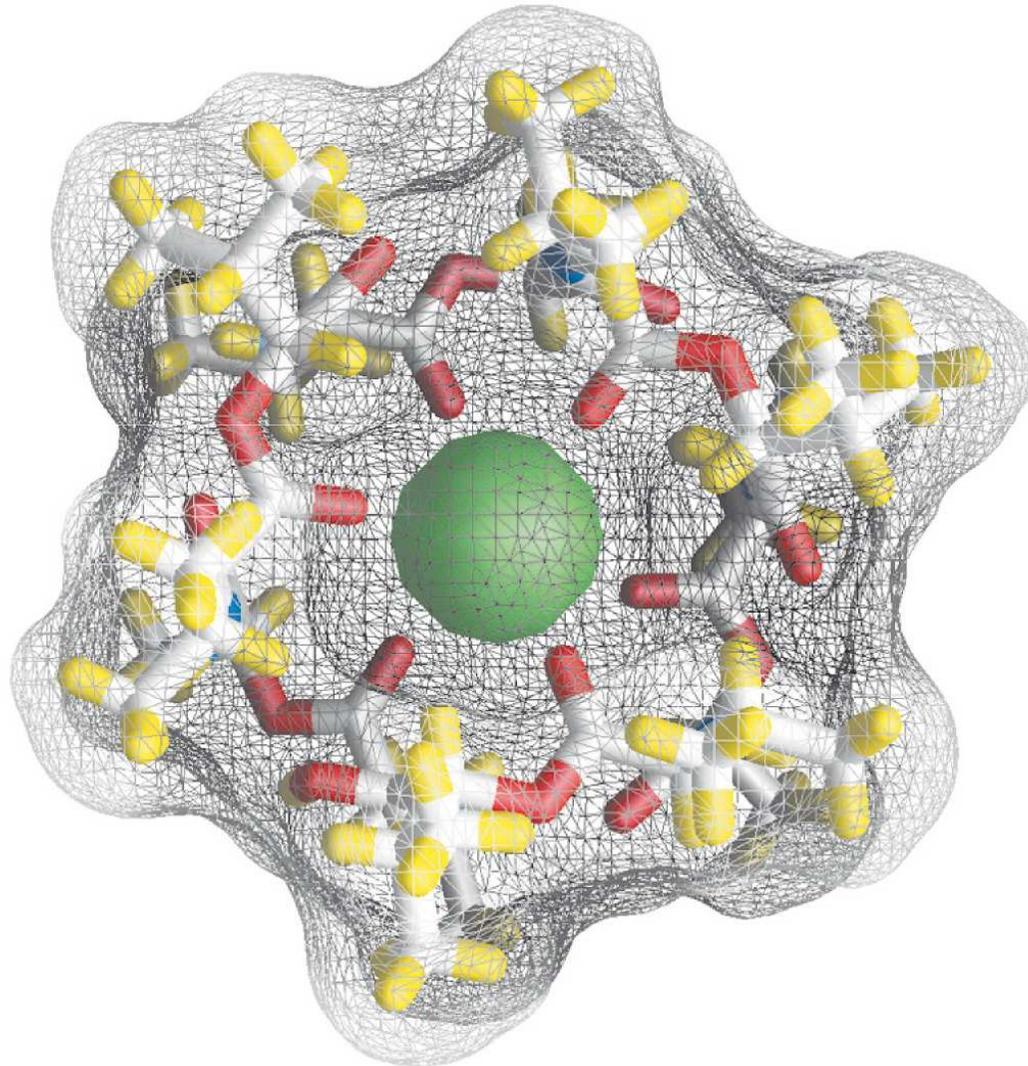


(b)

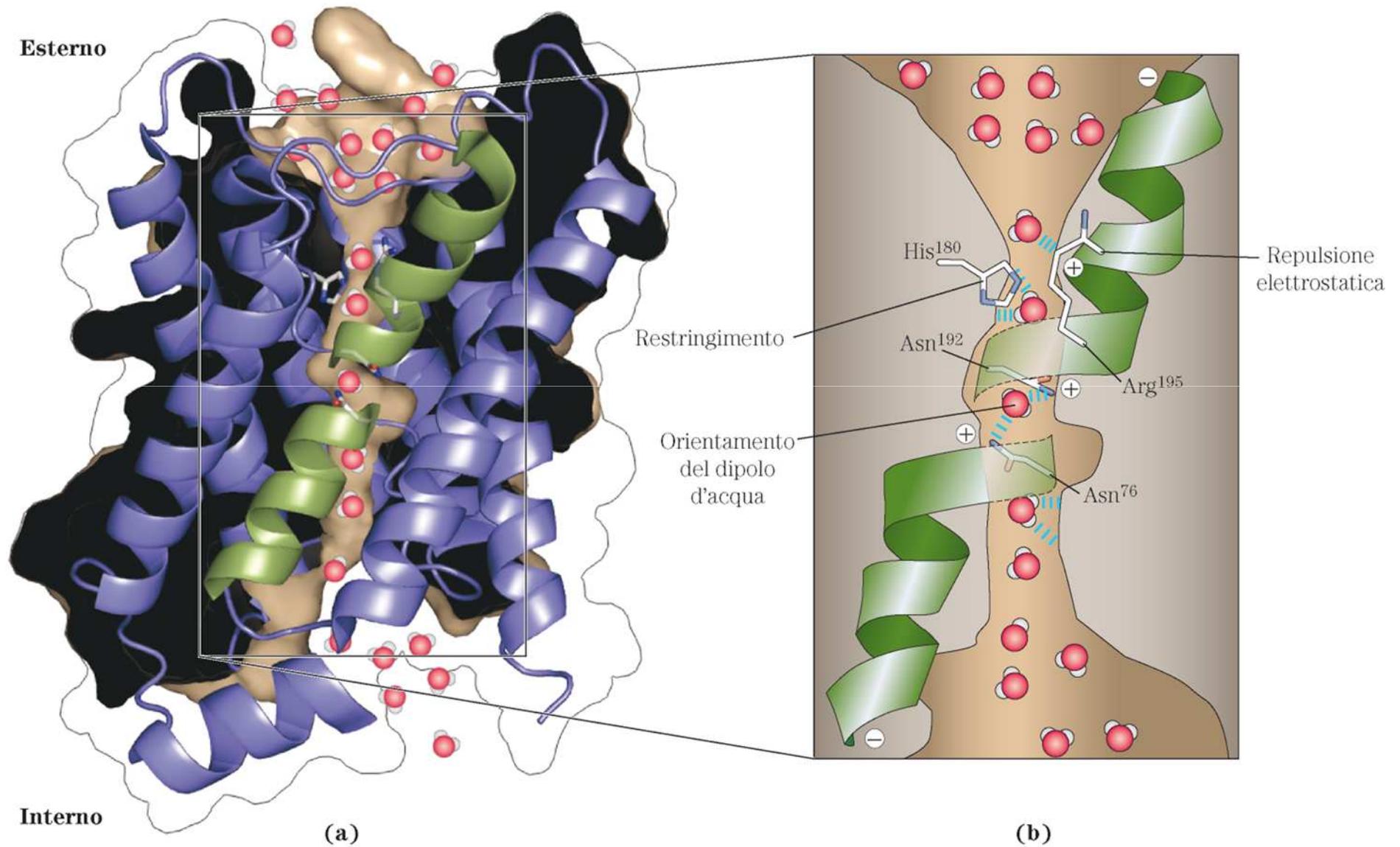
11.29 – Struttura proposta per il GLUT1 (la studentessa ha indicato la 11.30)



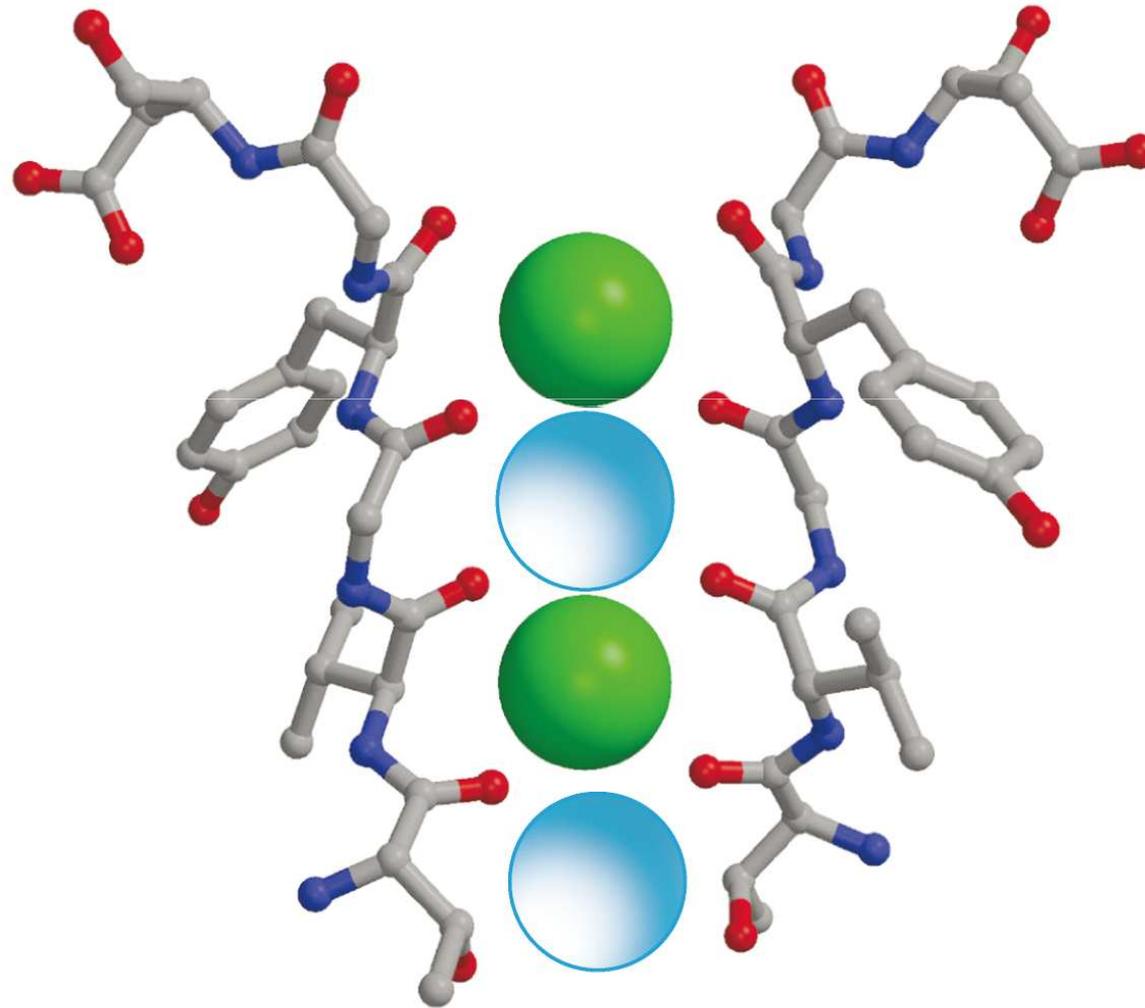
11.45 – La valinomicina, uno ionoforo peptidico che lega il K^+



11.46 – Acquaporina

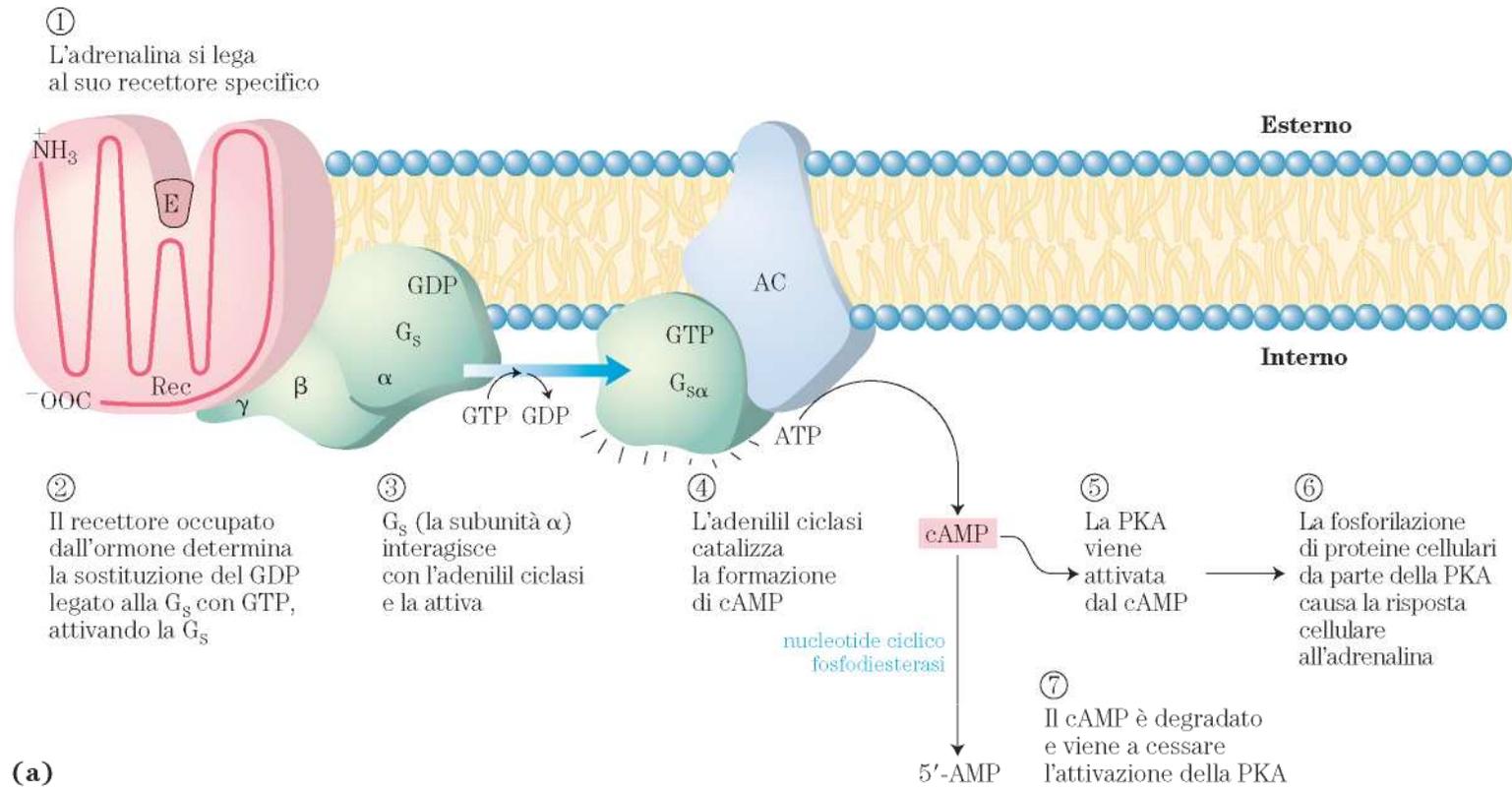


11.49 – Siti di legame per il K^+ nel poro di selettività del canale del K^+

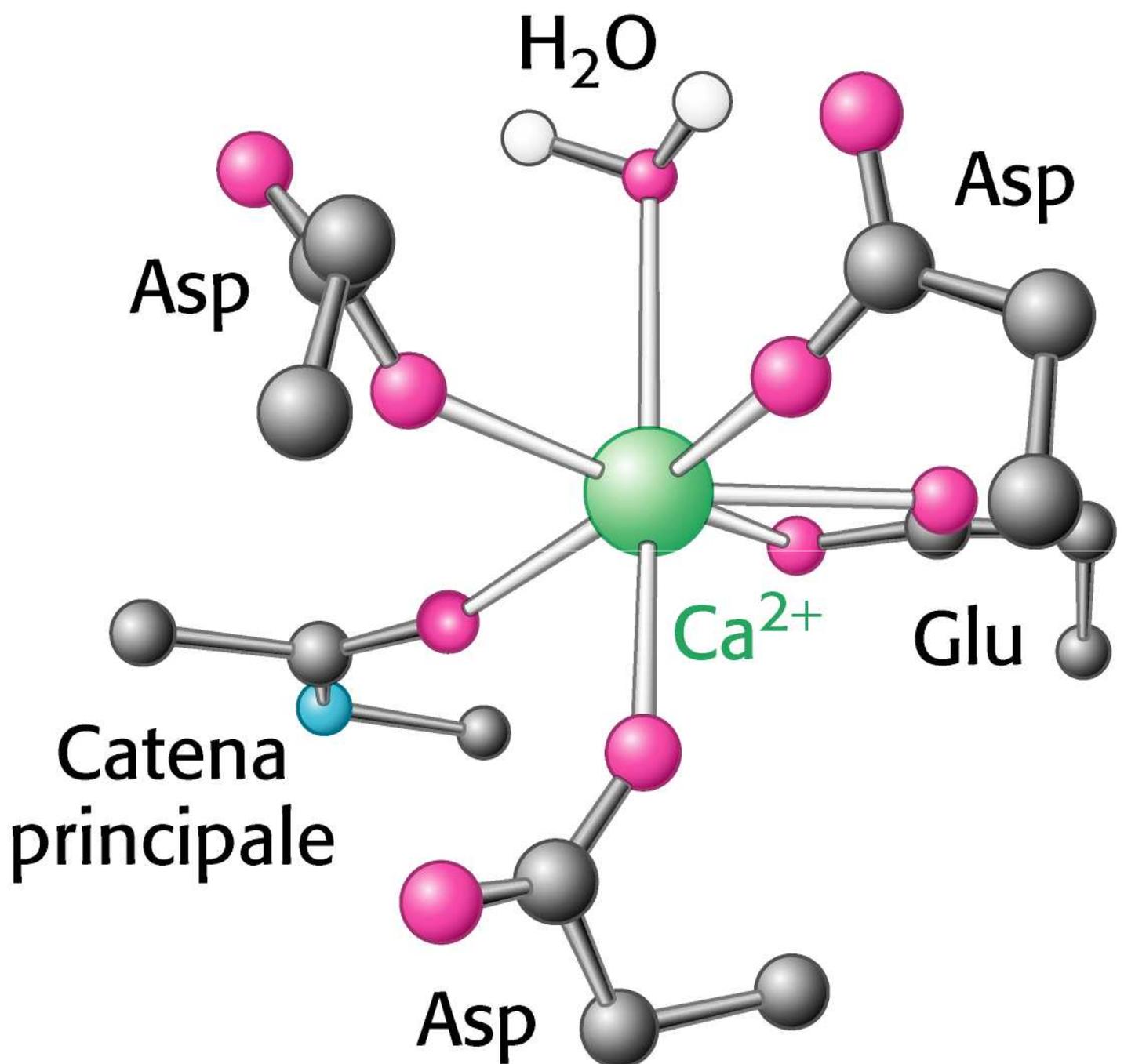


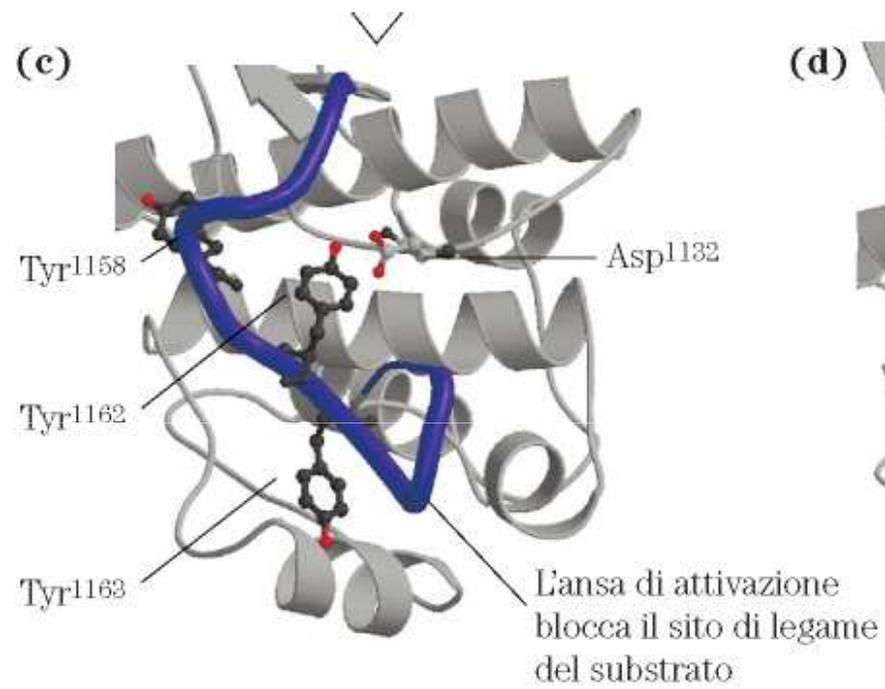
Capitolo 12:

Biosegnalazione

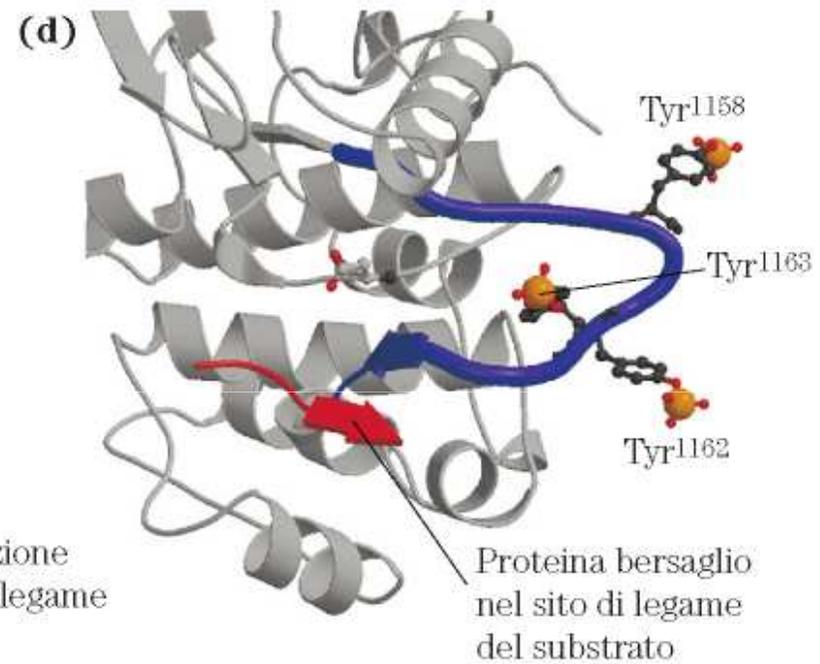


(a)





Dominio tirosina chinasi inattivo
(non fosforilato)



Dominio tirosina chinasi attivo
(fosforilato tre volte)

(b)

