

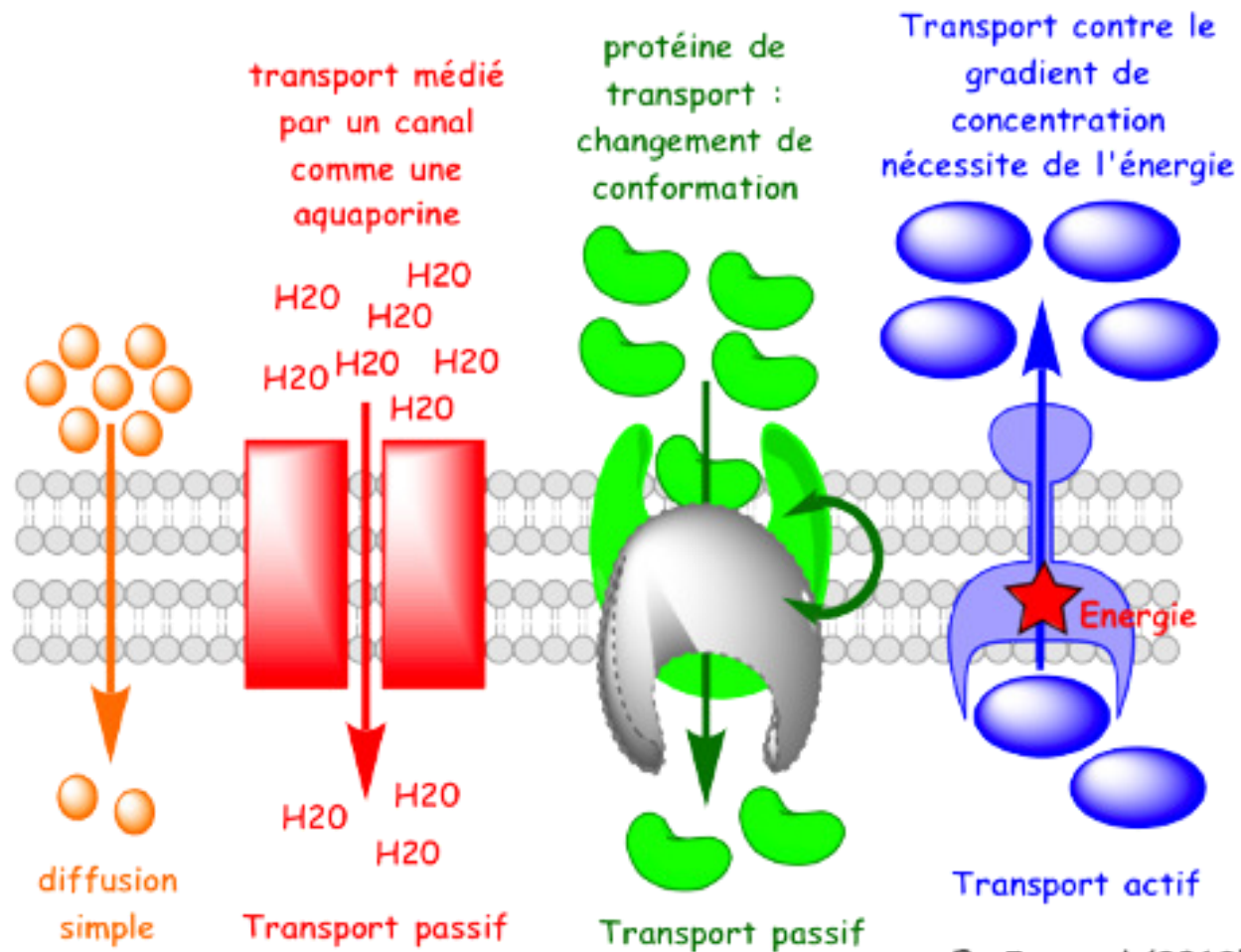
# **LE TRANSPORT MEMBRANAIRE**

Concentration élevée

Extérieur

Intérieur

Concentration faible



transport médié par un canal comme une aquaporine

protéine de transport : changement de conformation

Transport contre le gradient de concentration nécessite de l'énergie

diffusion simple

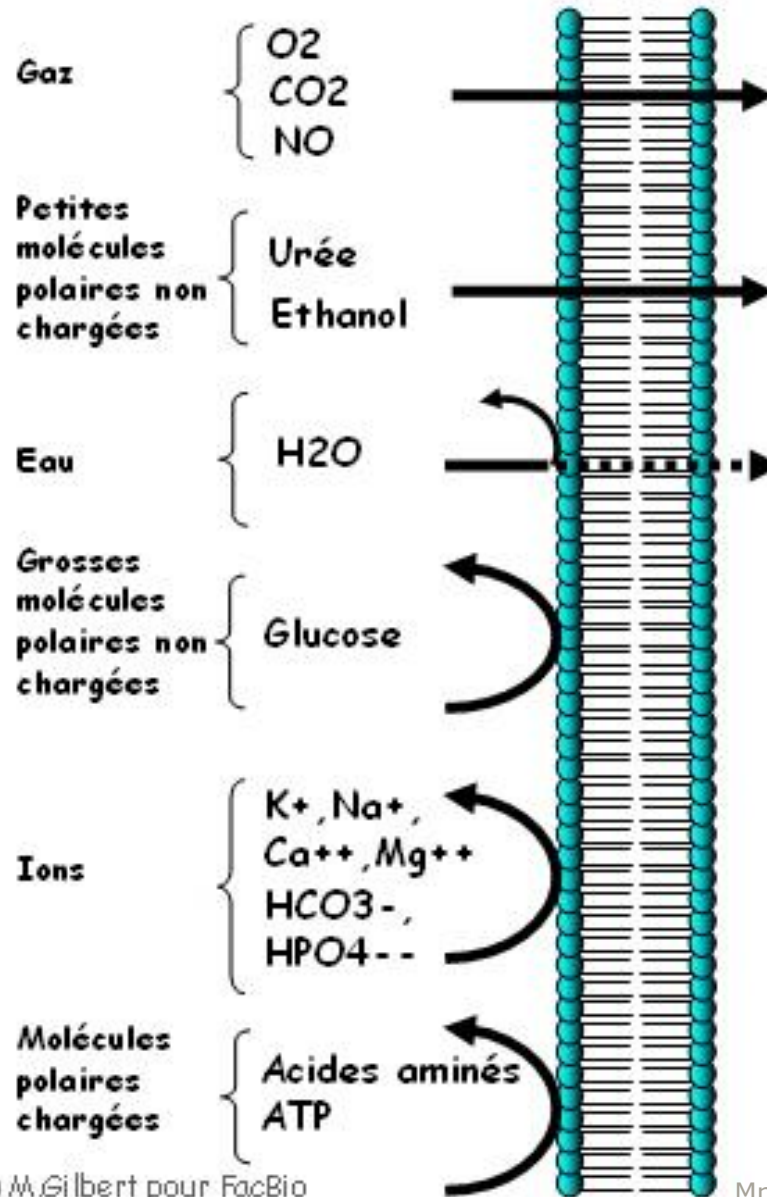
Transport passif

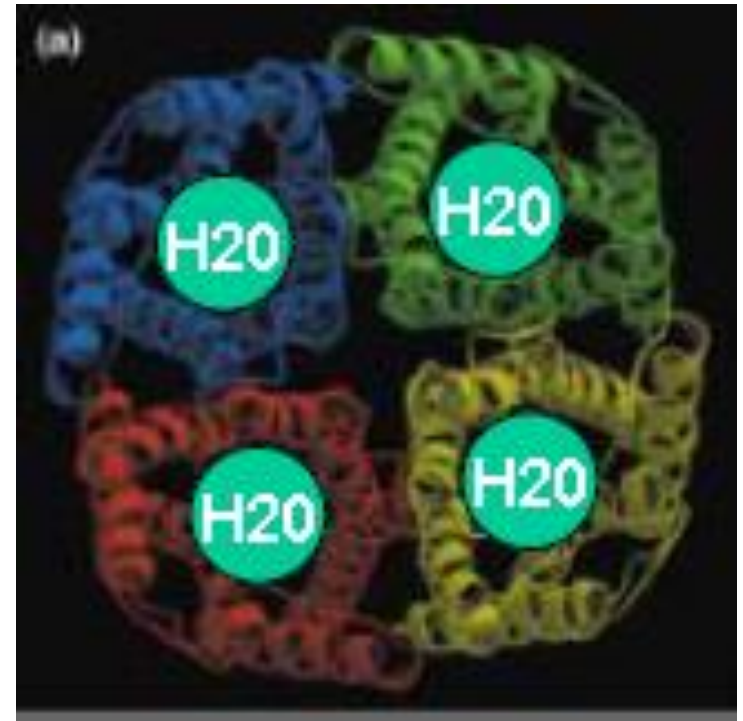
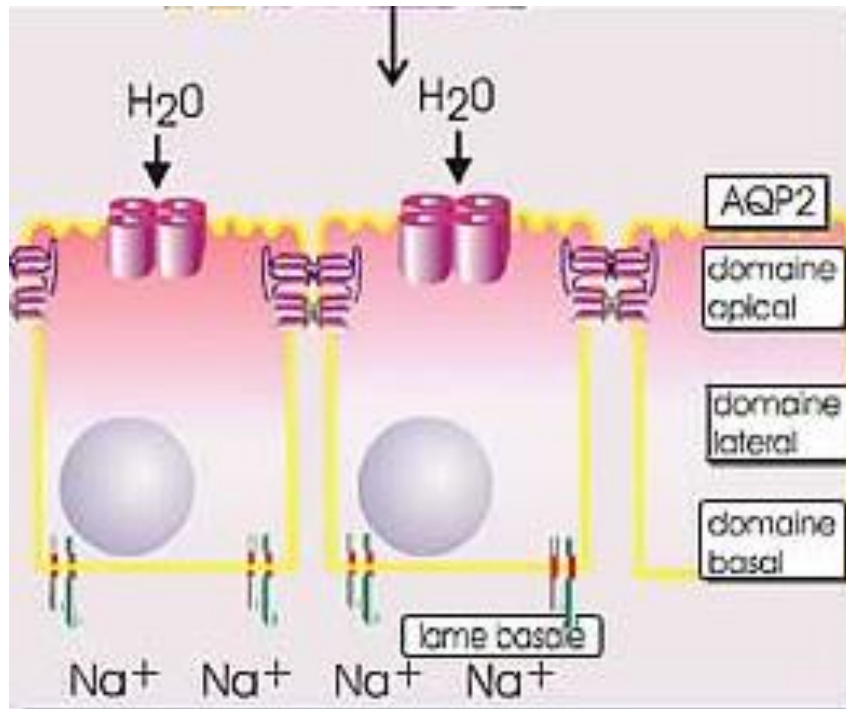
Transport passif

Transport actif

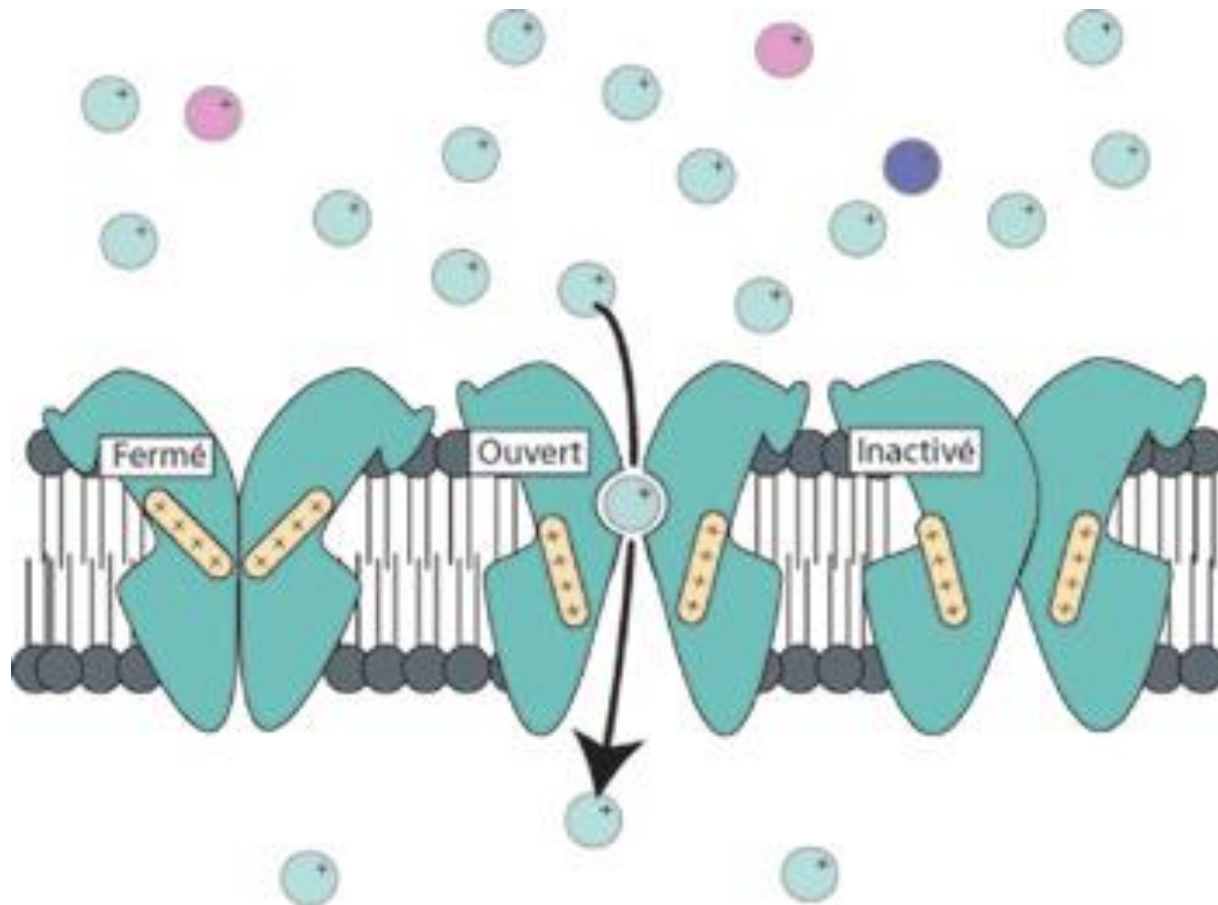
E. Jaspard (2012)

## FACTEURS RÉGULANT LA DIFFUSION SIMPLE

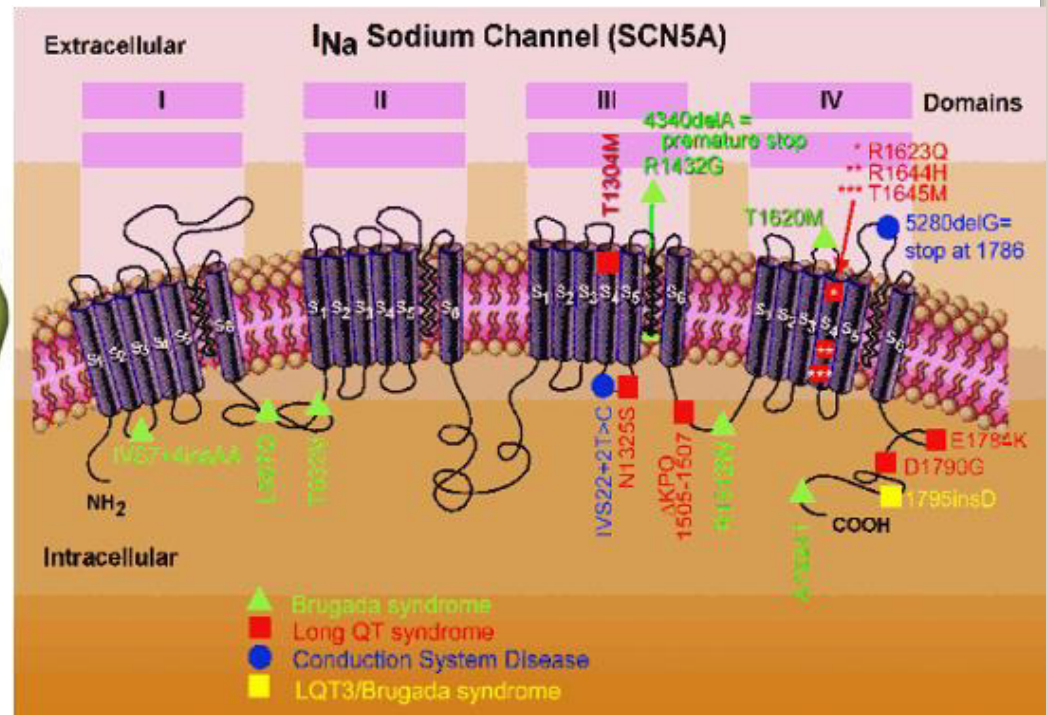
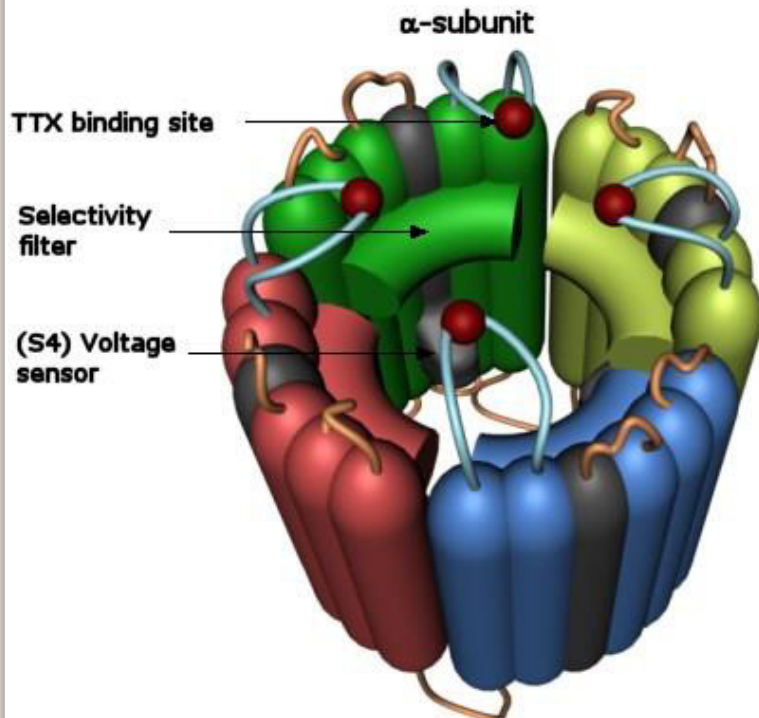




# AQUAPORINES

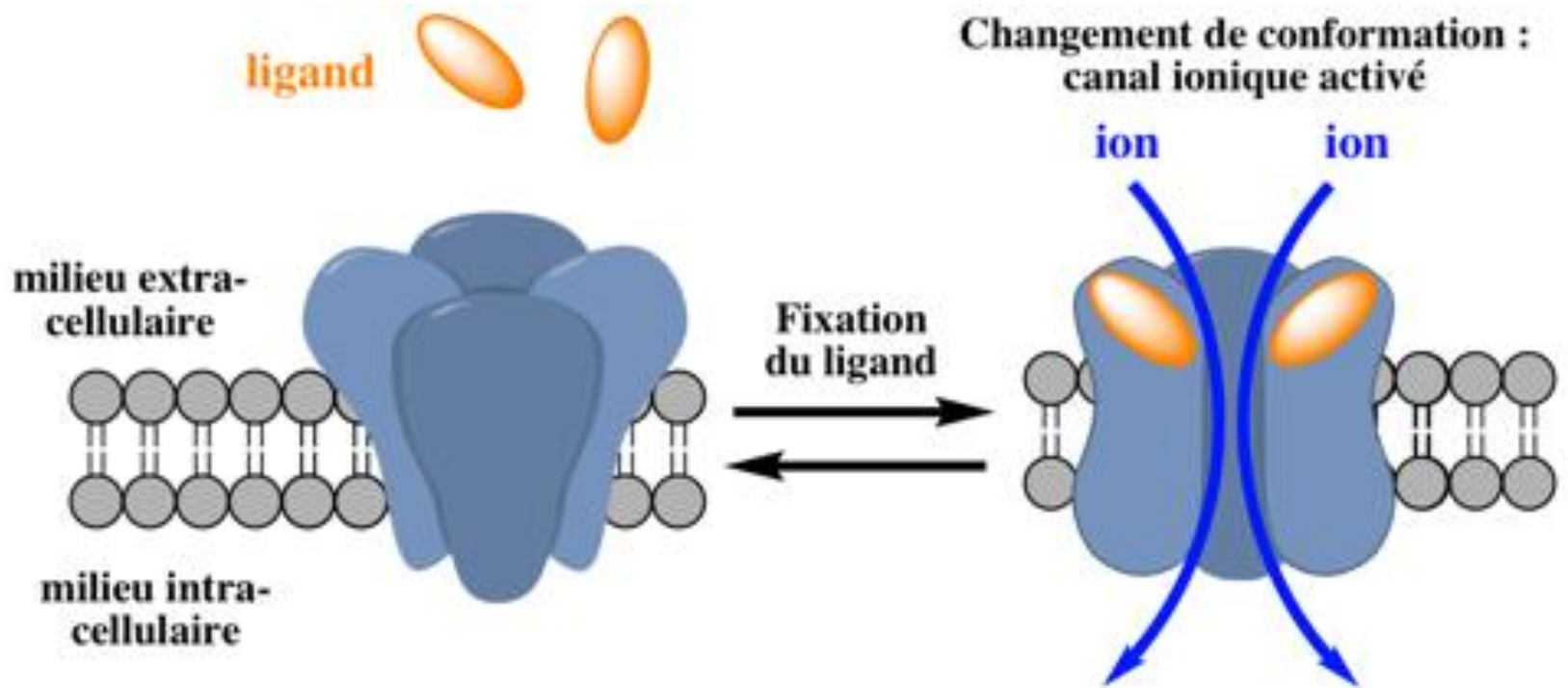


**Les 3 conformations adoptées par les canaux ioniques**

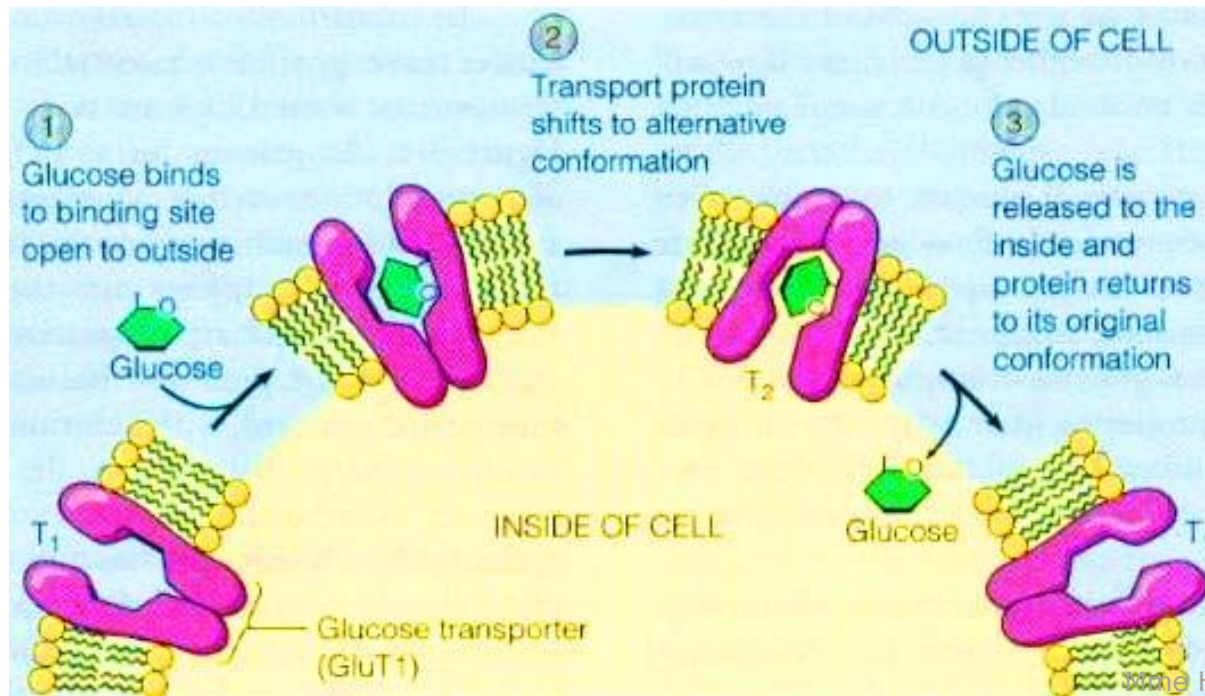
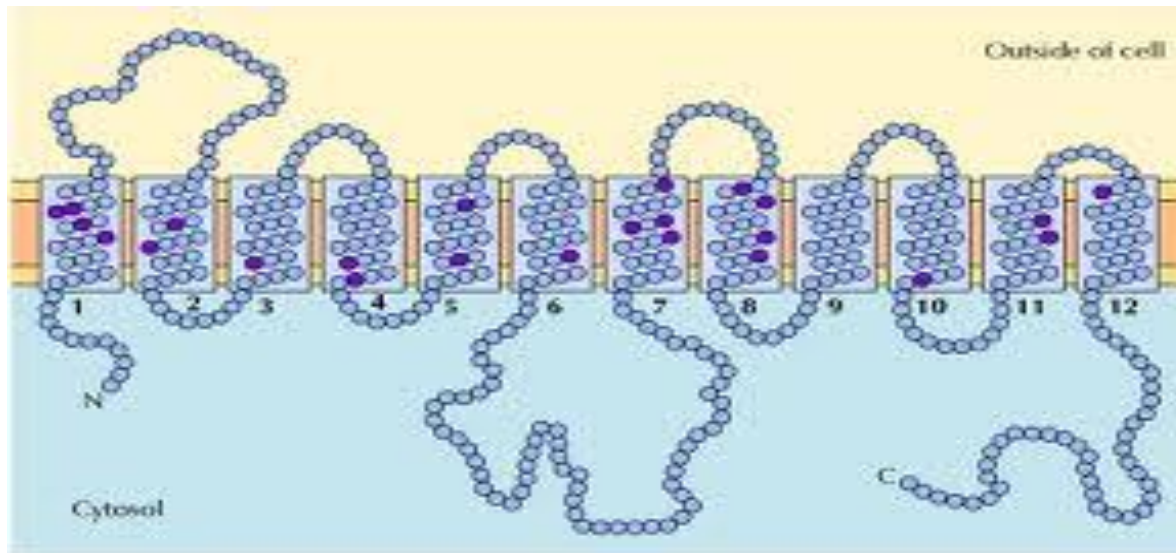


# Le canal Na<sup>+</sup>





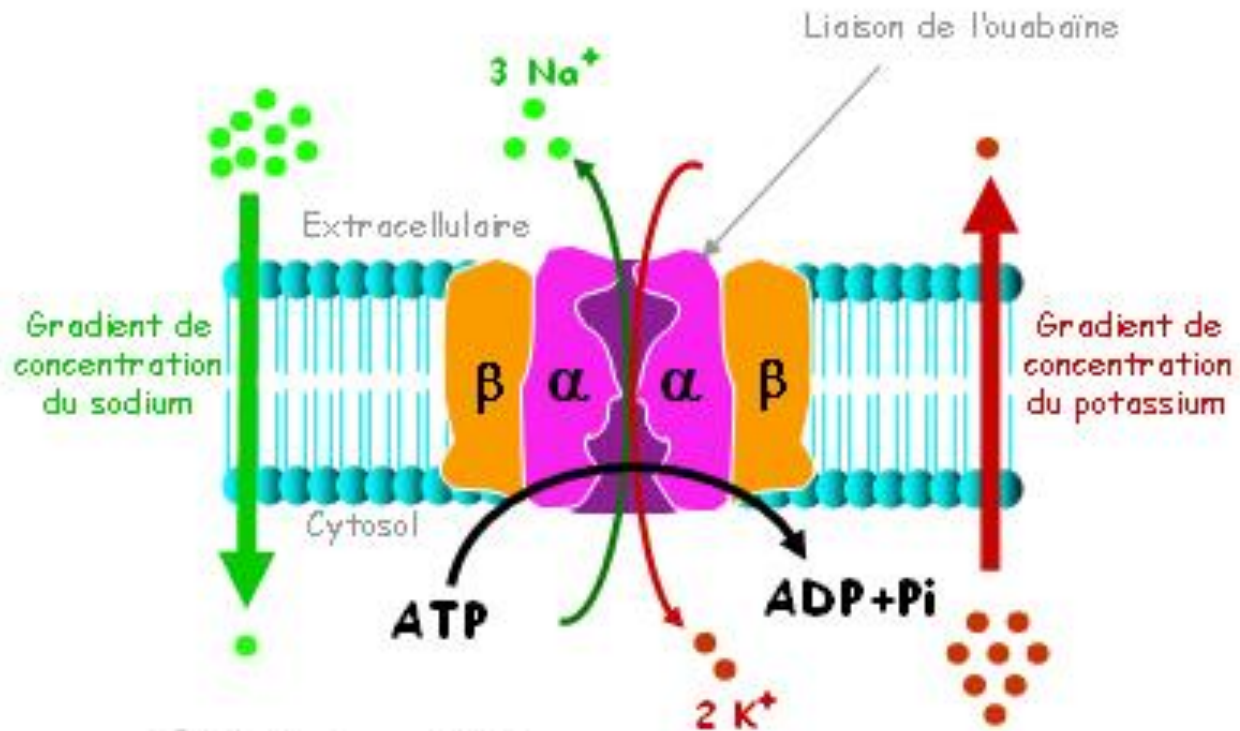
*E. Jaspard (2013)*



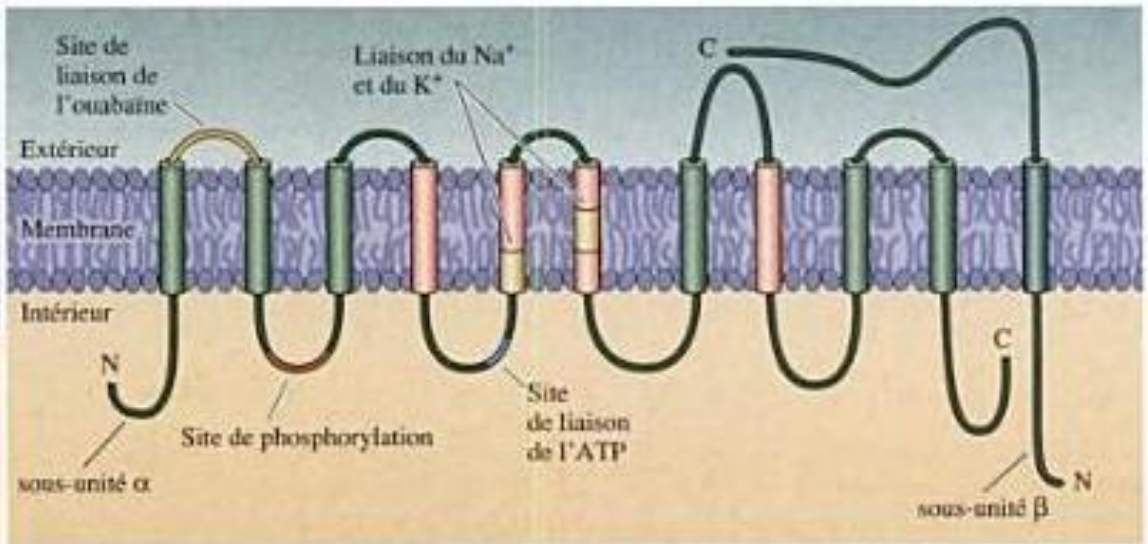
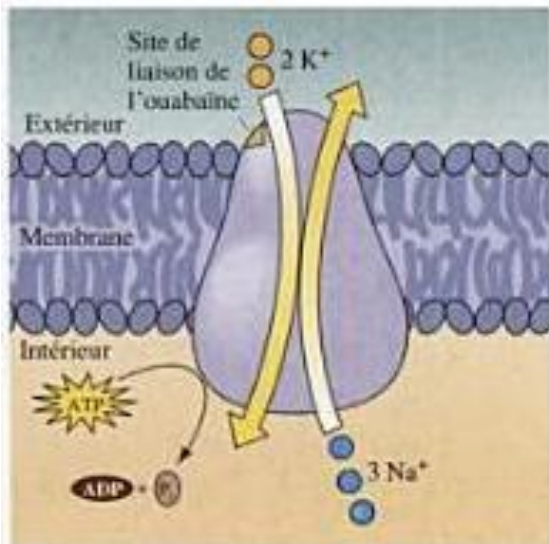
## Le transporteur du glucose

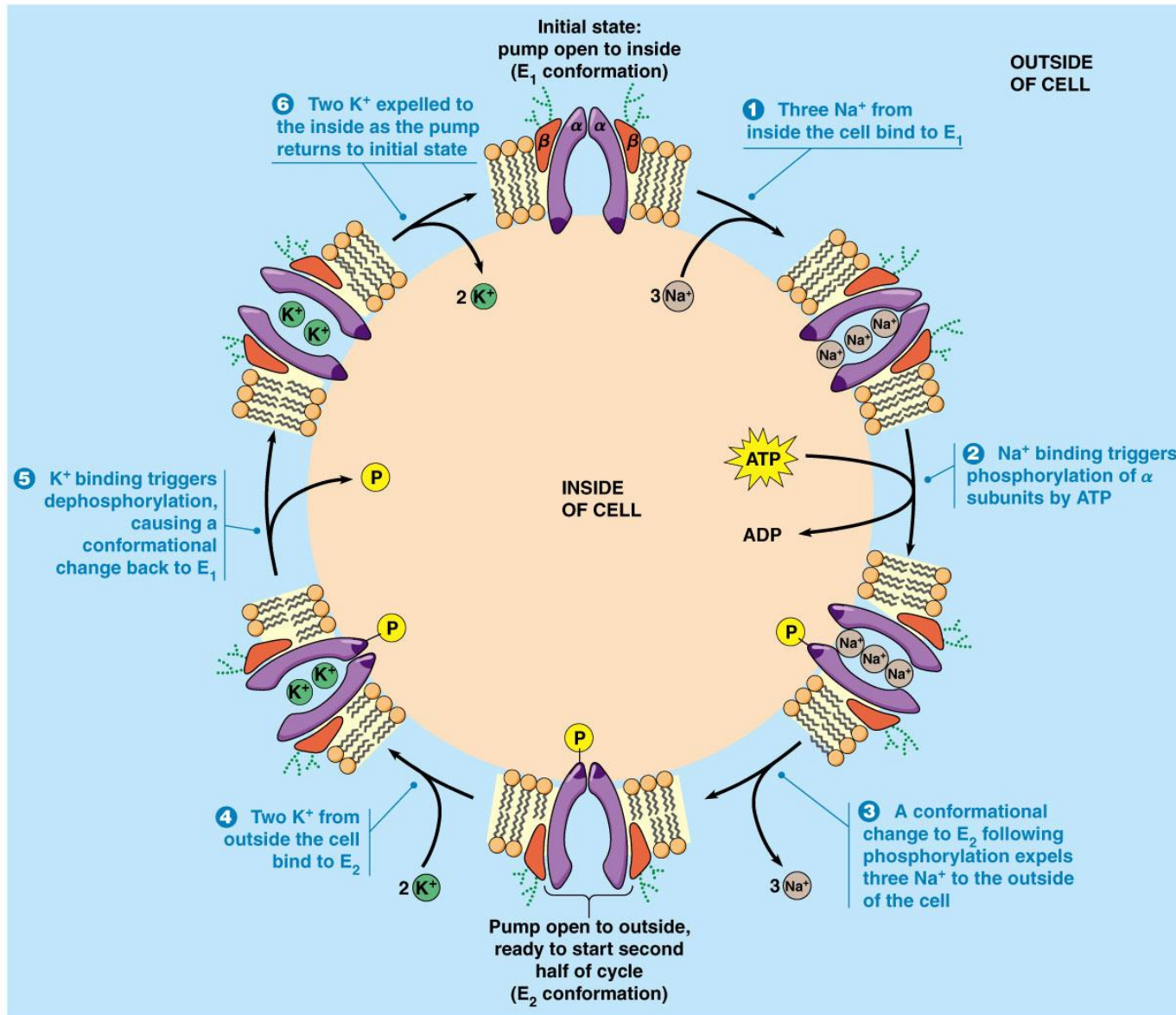


## FONCTIONNEMENT DE LA POMPE $\text{Na}^+/\text{K}^+$ ATPase



© M. Gilbert pour FacBio

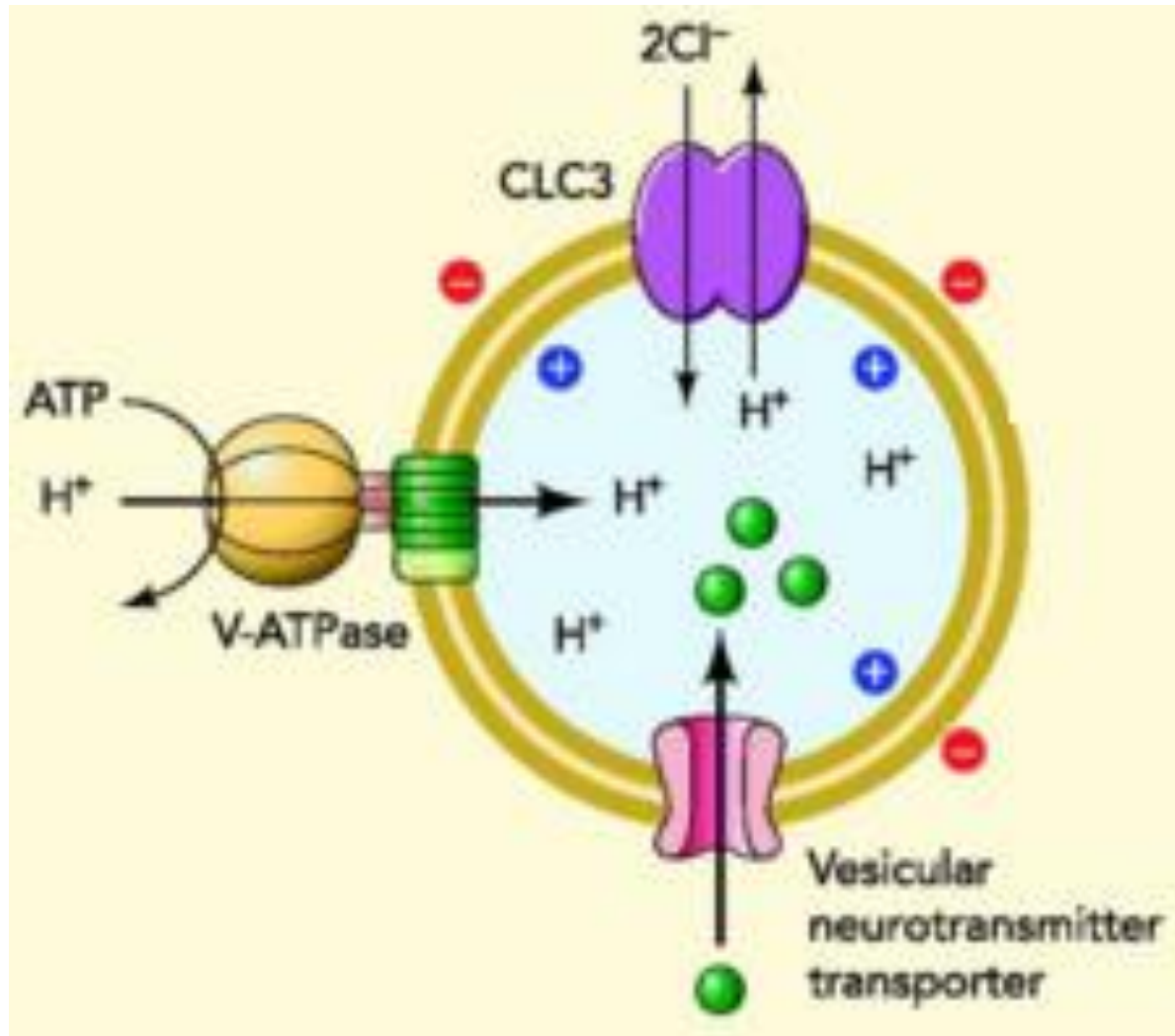




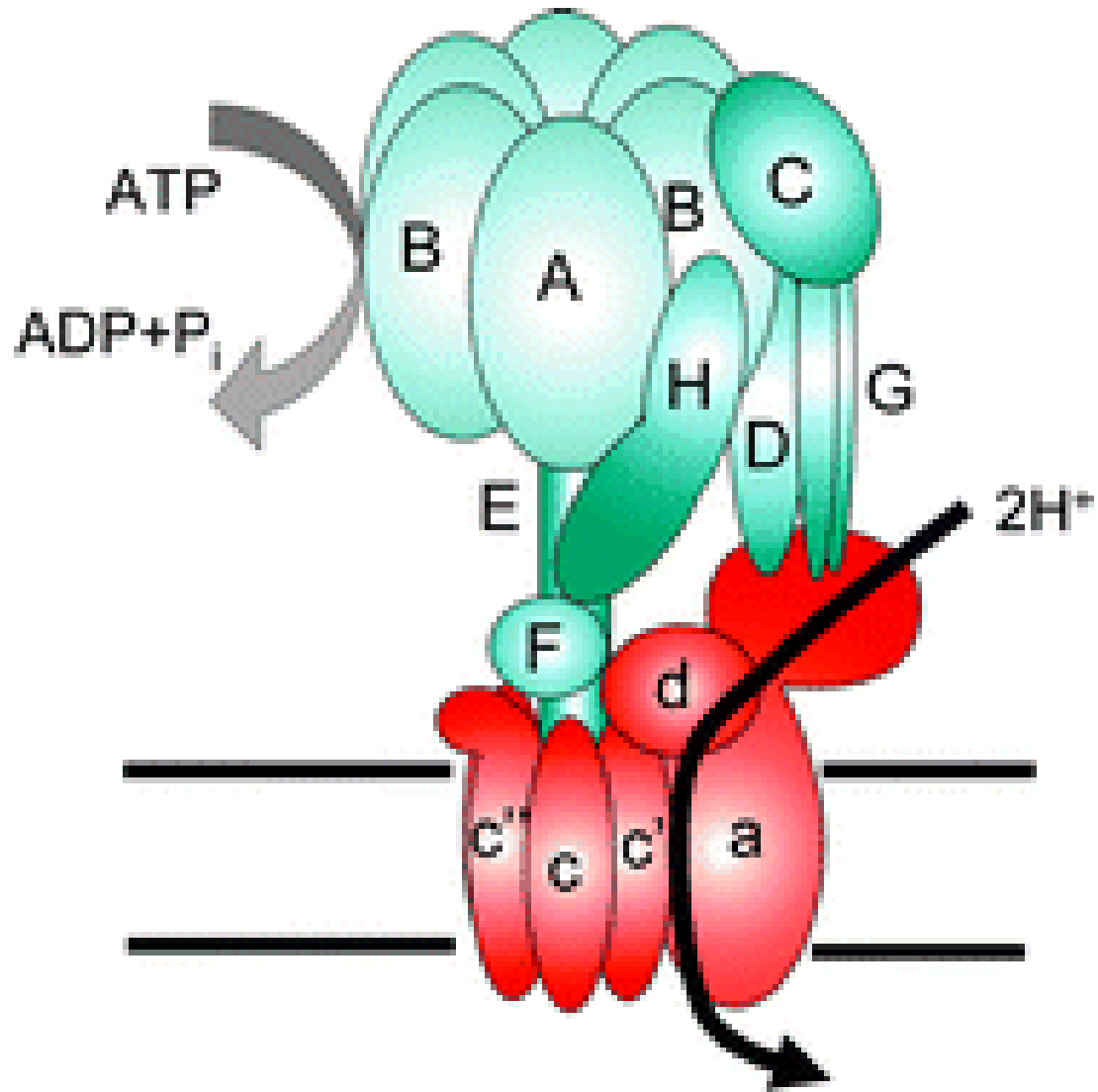
© 2012 Pearson Education, Inc.

## Mécanisme de fonctionnement de l'ATPase Na<sup>+</sup>/K<sup>+</sup>

Mme HADDAD

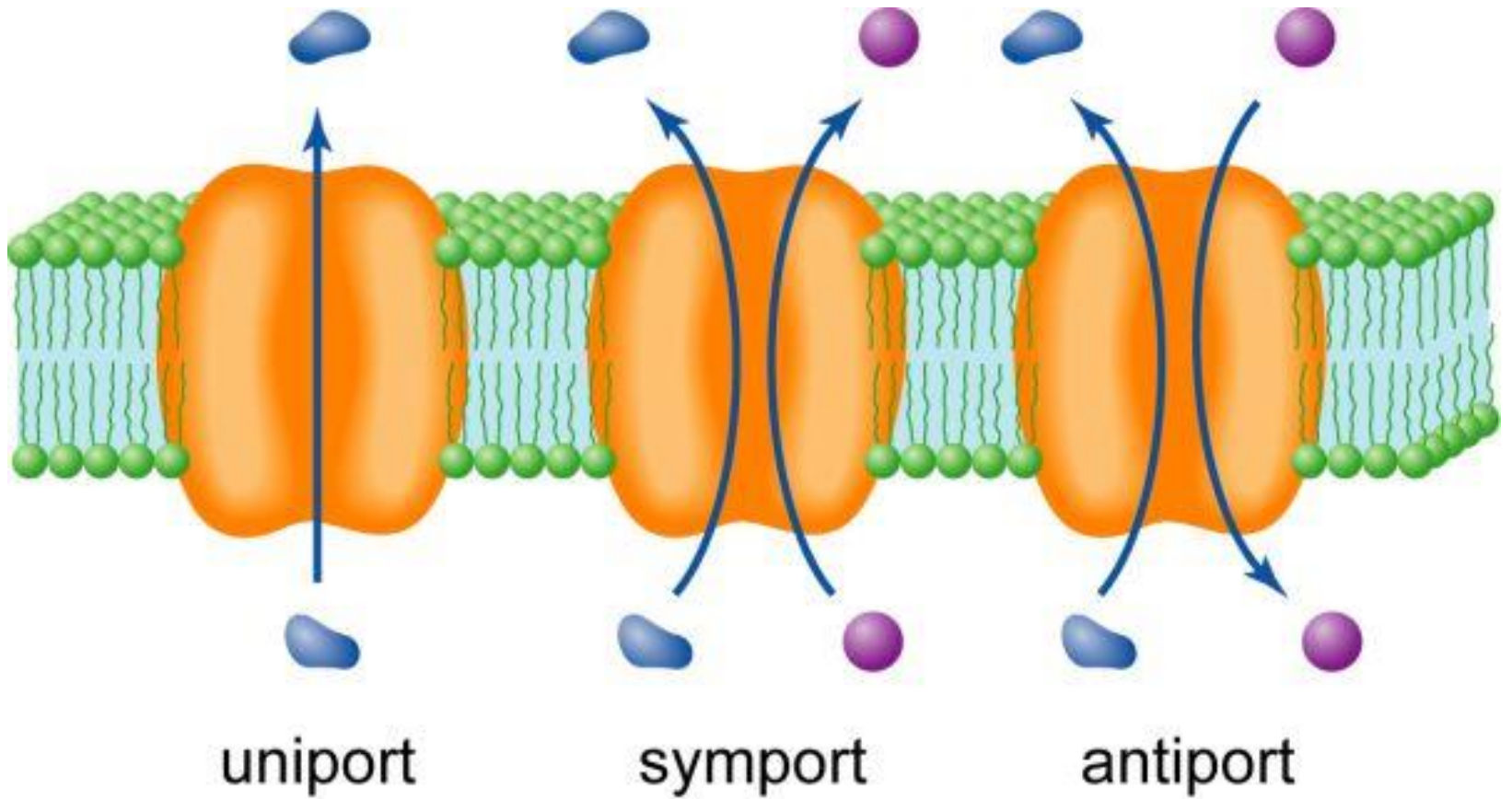


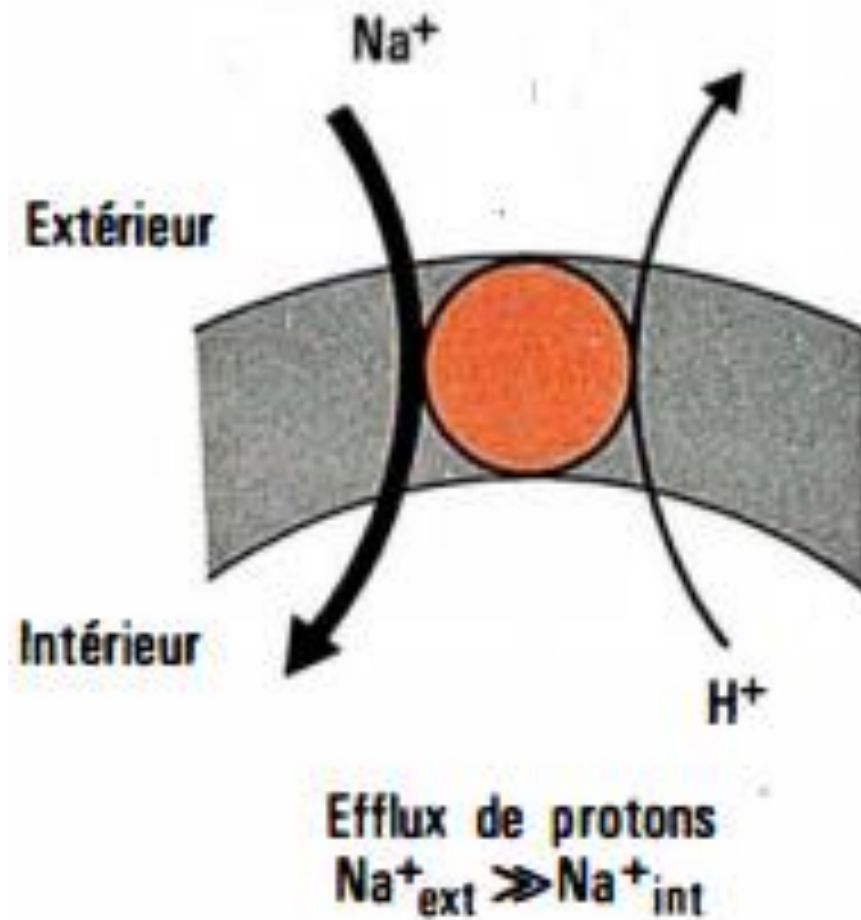
## ATPase vacuolaire



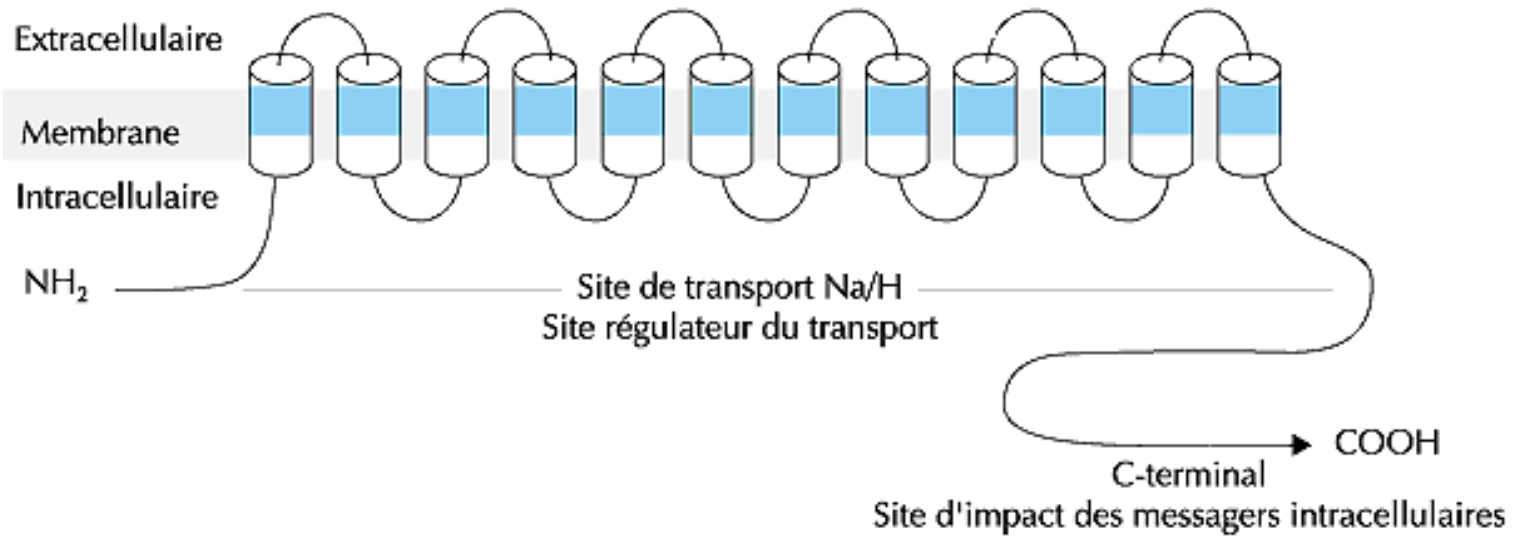
## L'ATPase H<sup>+</sup> des vésicules présynaptiques



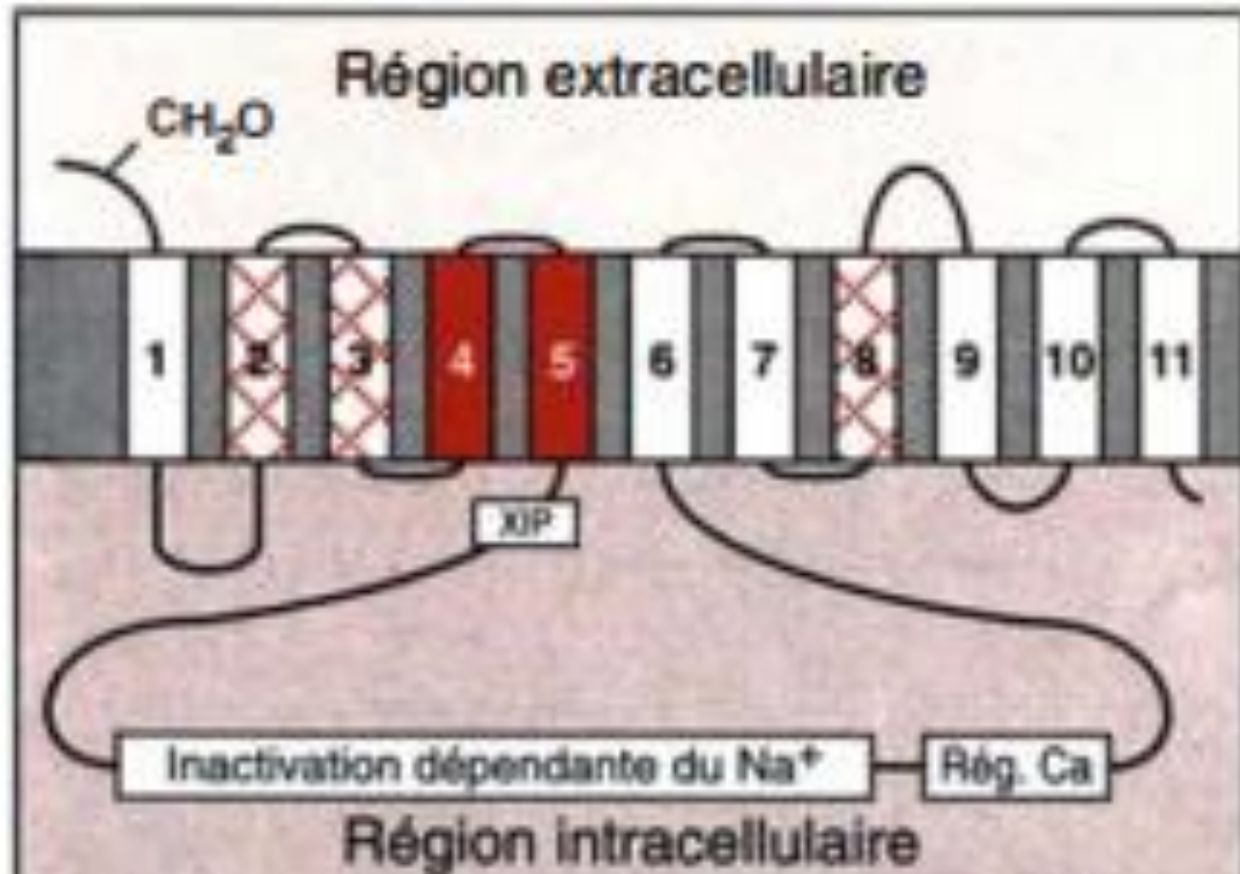




## L'échangeur Na<sup>+</sup>/H<sup>+</sup>

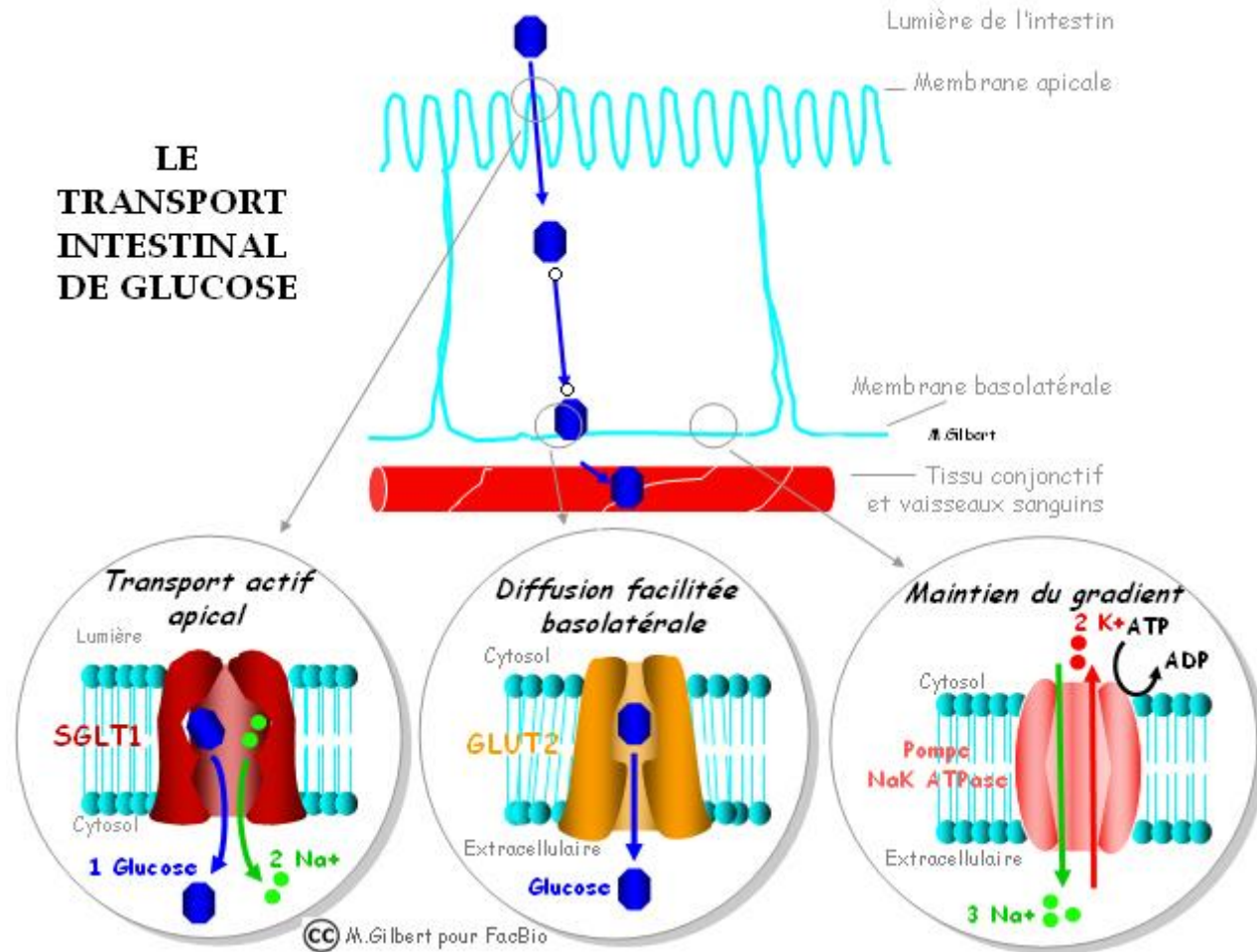


## L'échangeur Na<sup>+</sup>/H<sup>+</sup>



## L'échangeur Na<sup>+</sup>/Ca<sup>2+</sup>

# LE TRANSPORT INTESTINAL DE GLUCOSE



**symport**



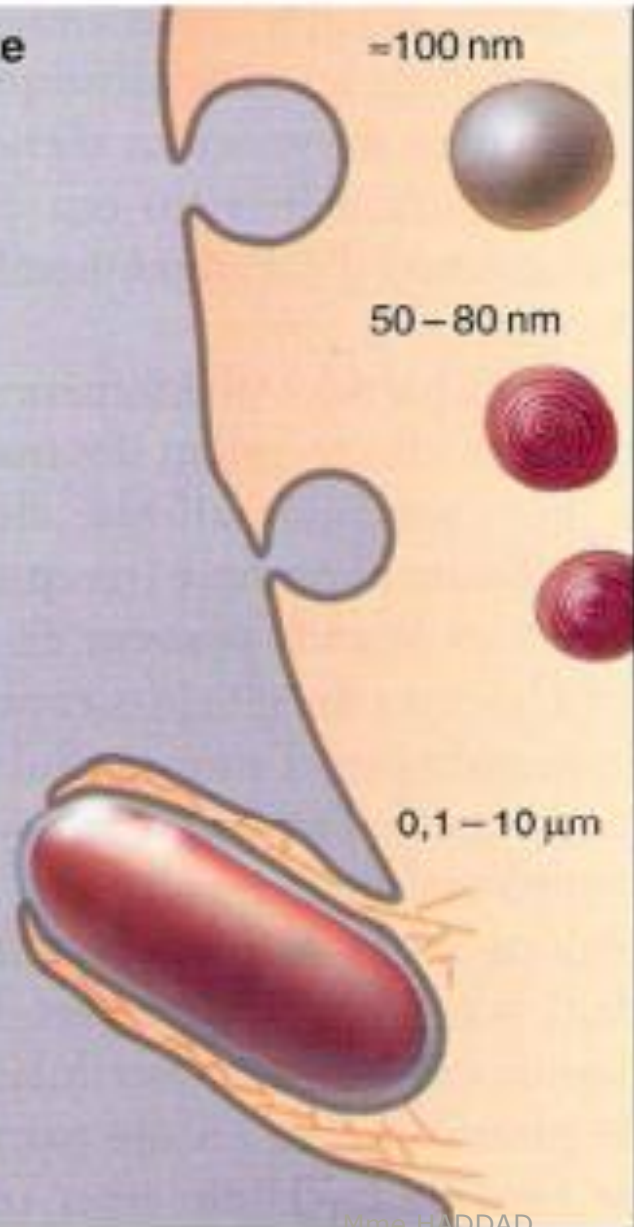
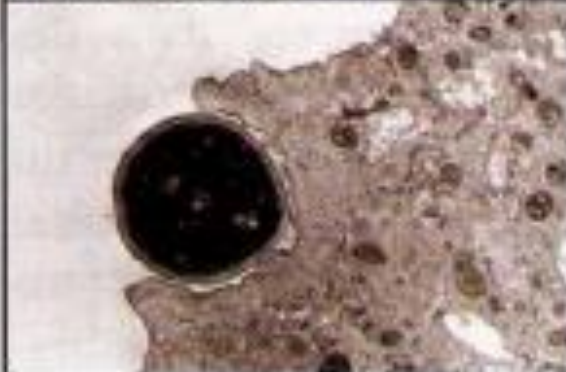
**C. Vésicule non recouverte**

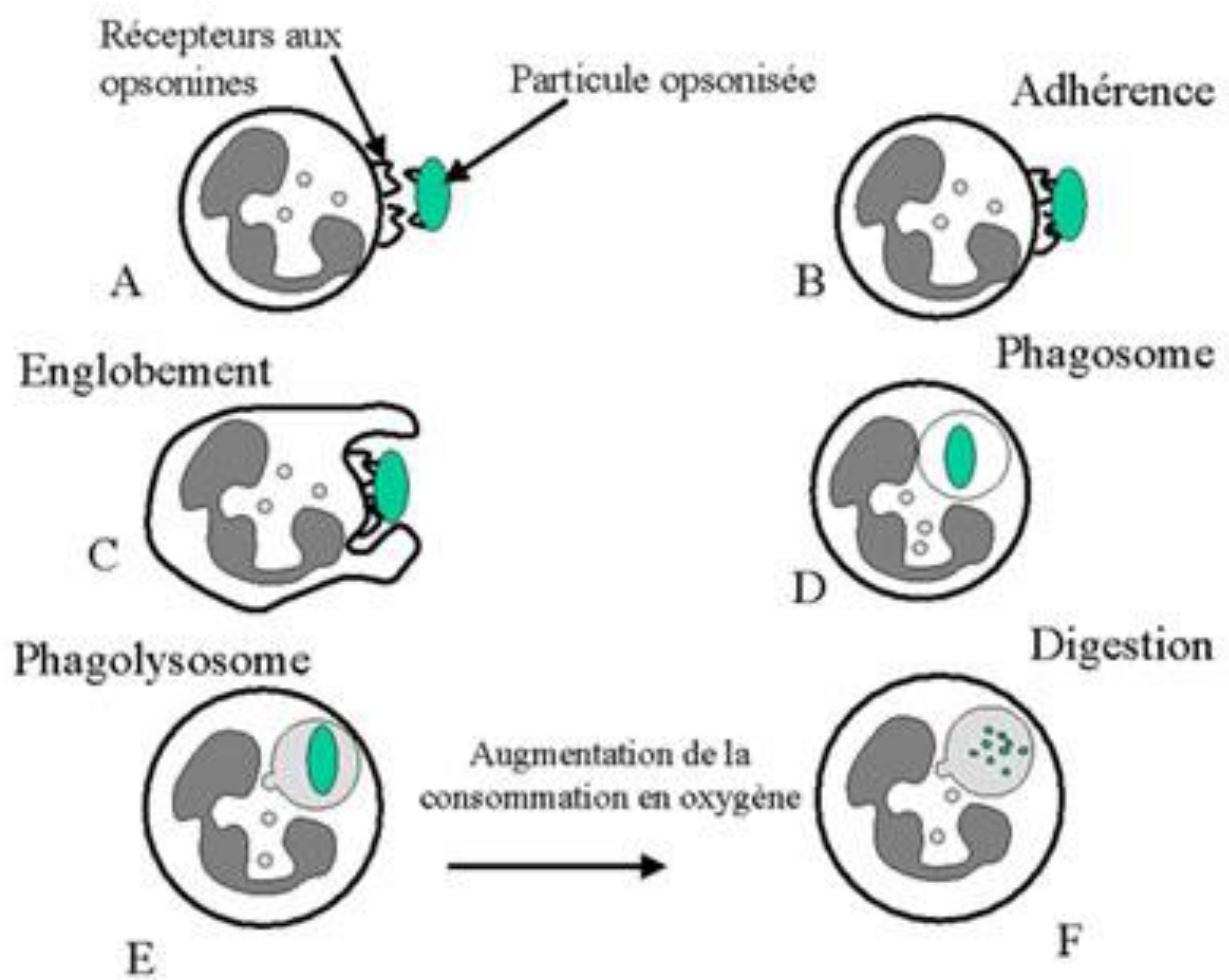


**D. Cavéole**

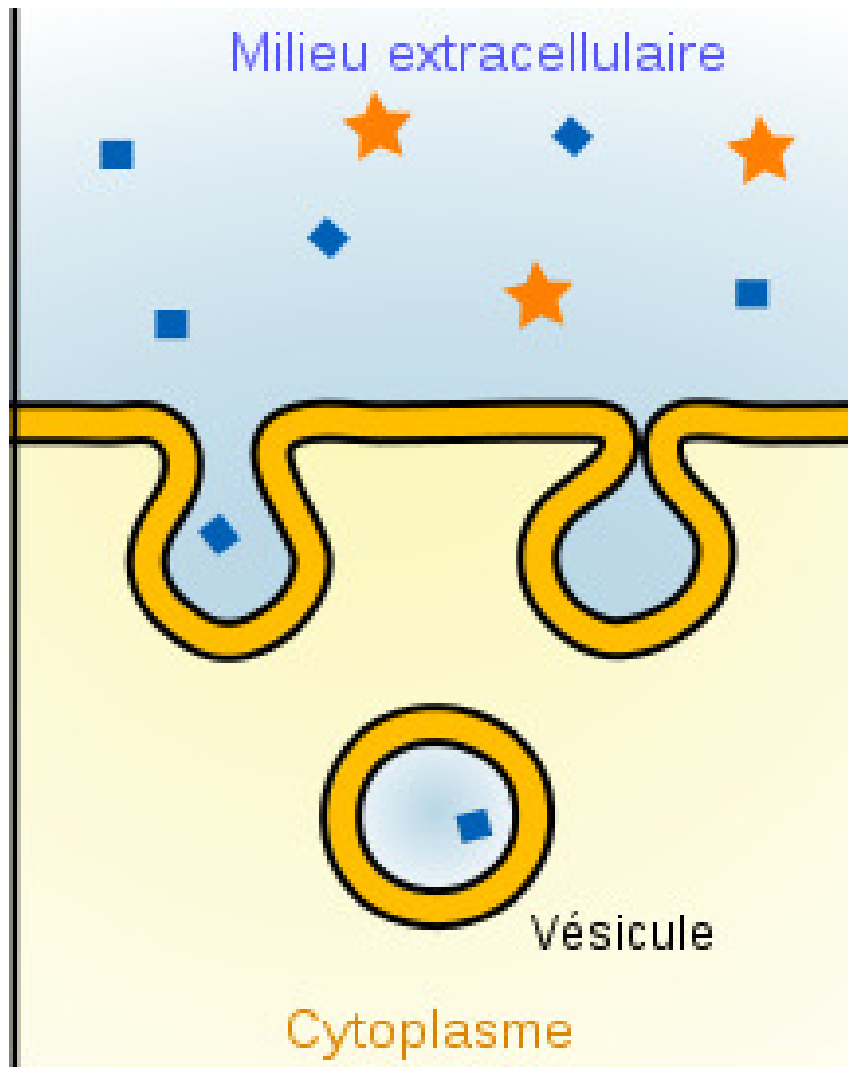


**E. Phagocytose**

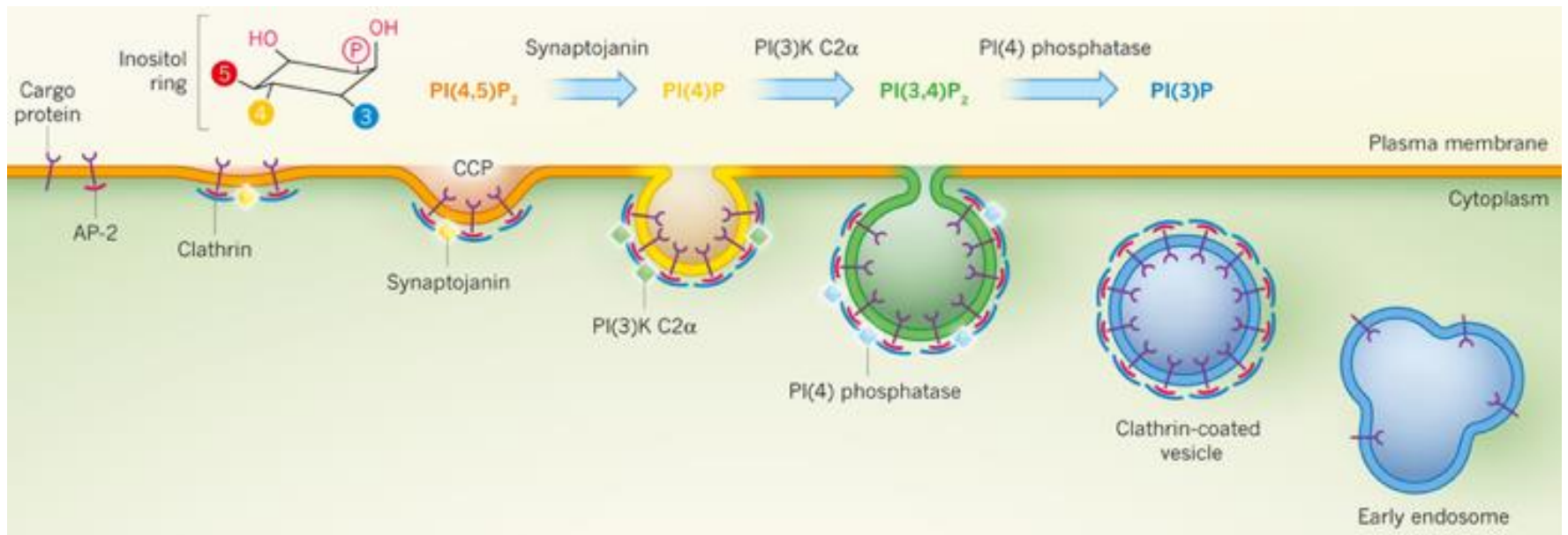




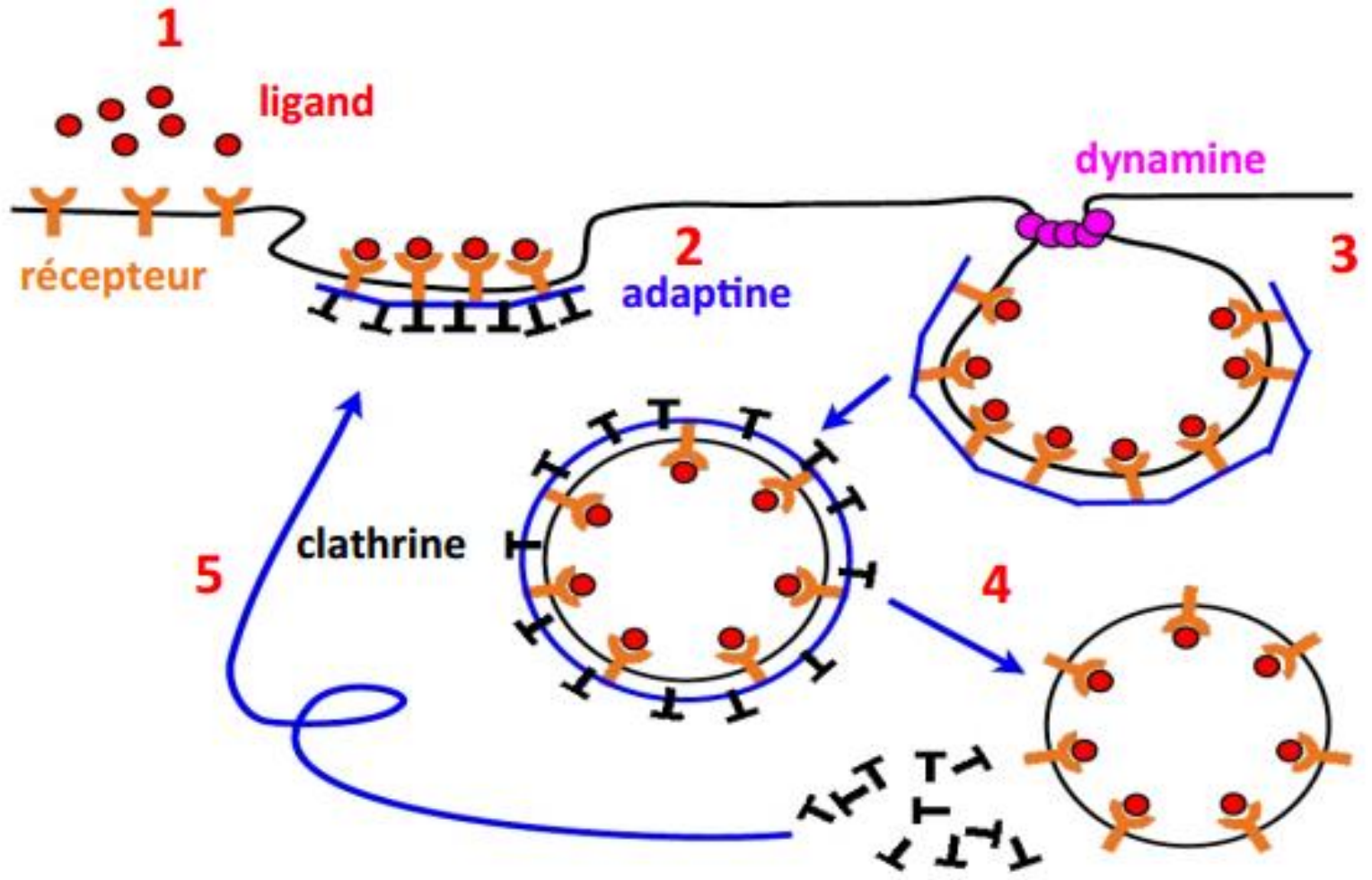
# La phagocytose



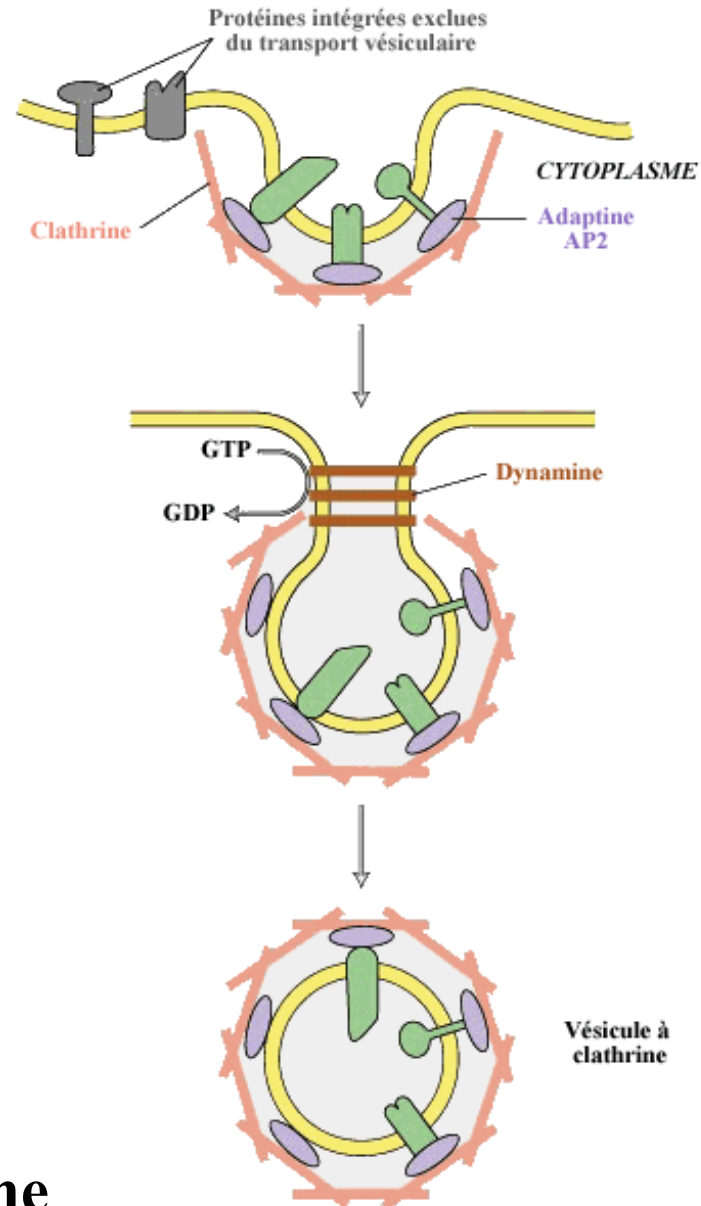
## **Pinocytose à vésicules lisses**



## Pinocytose à puits recouverts

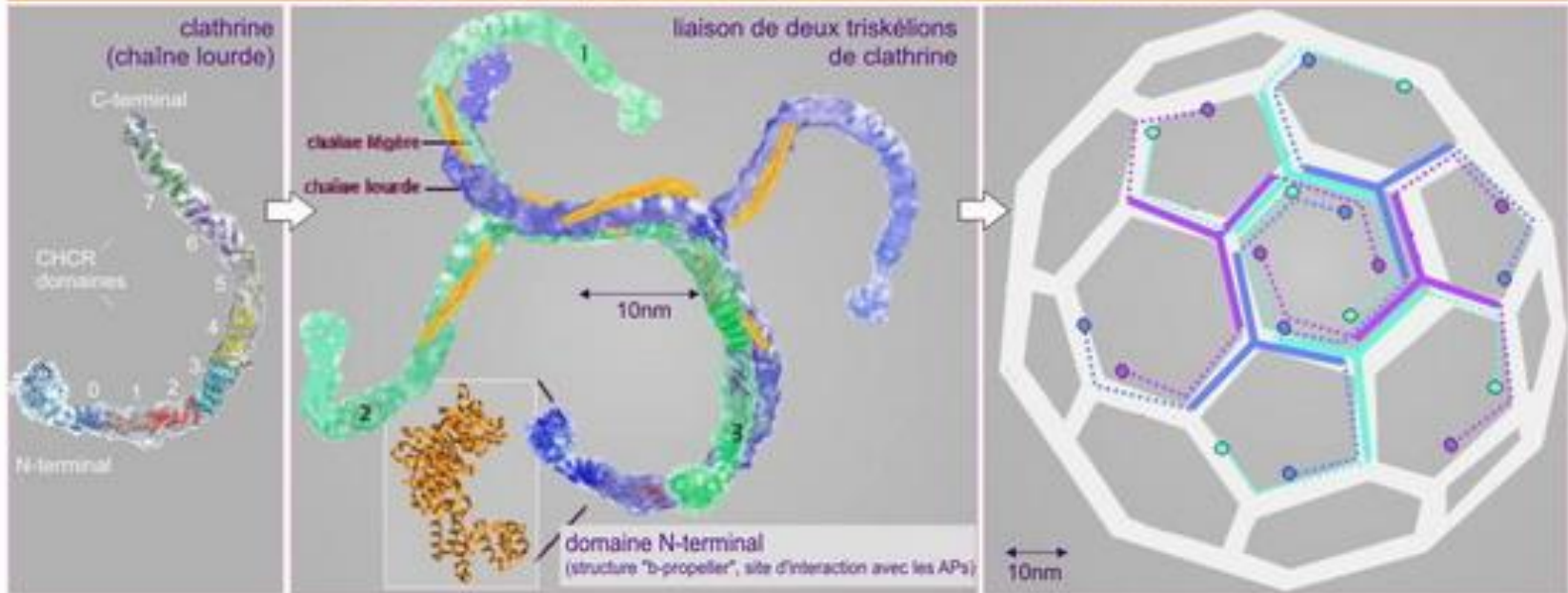


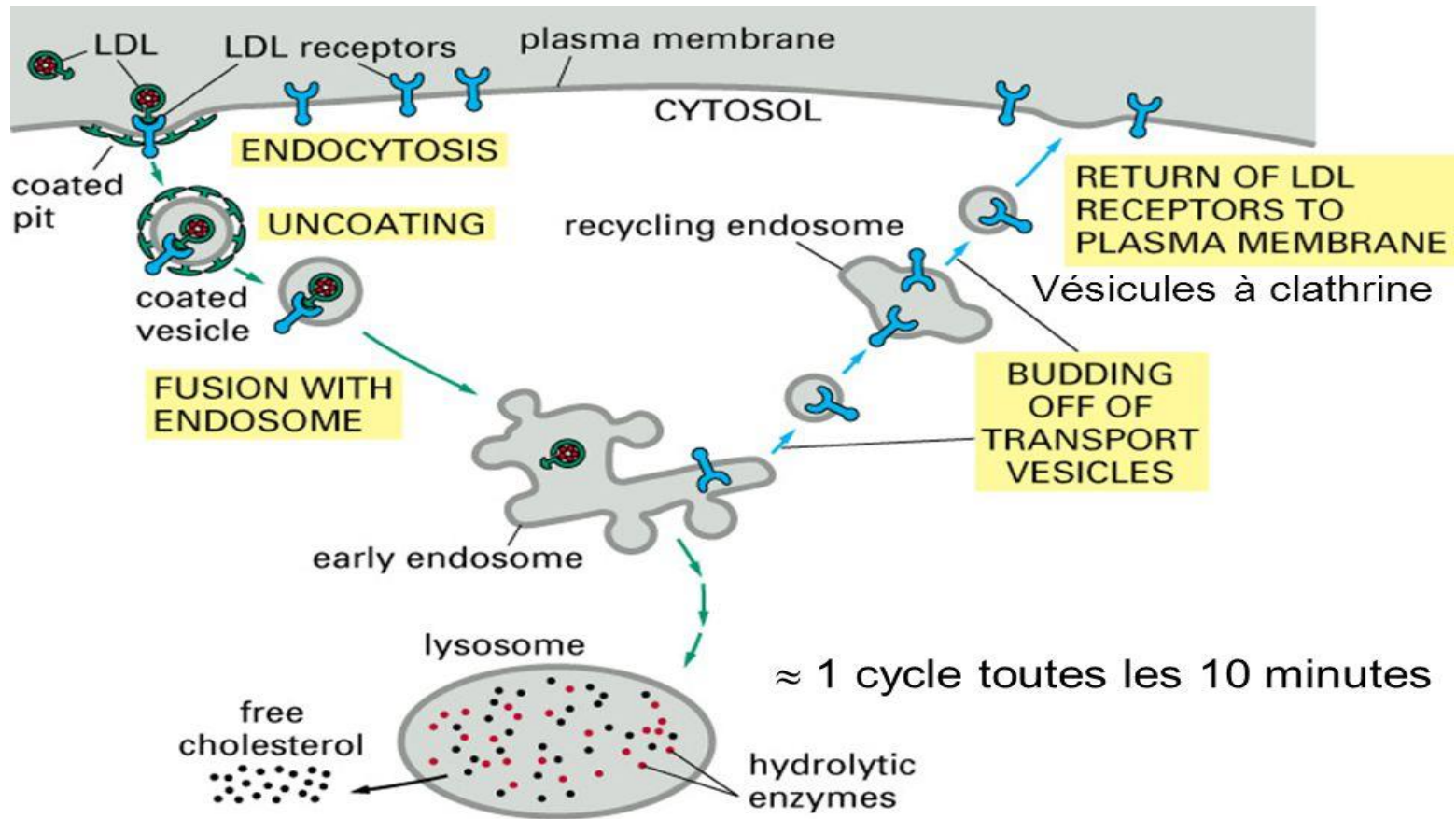




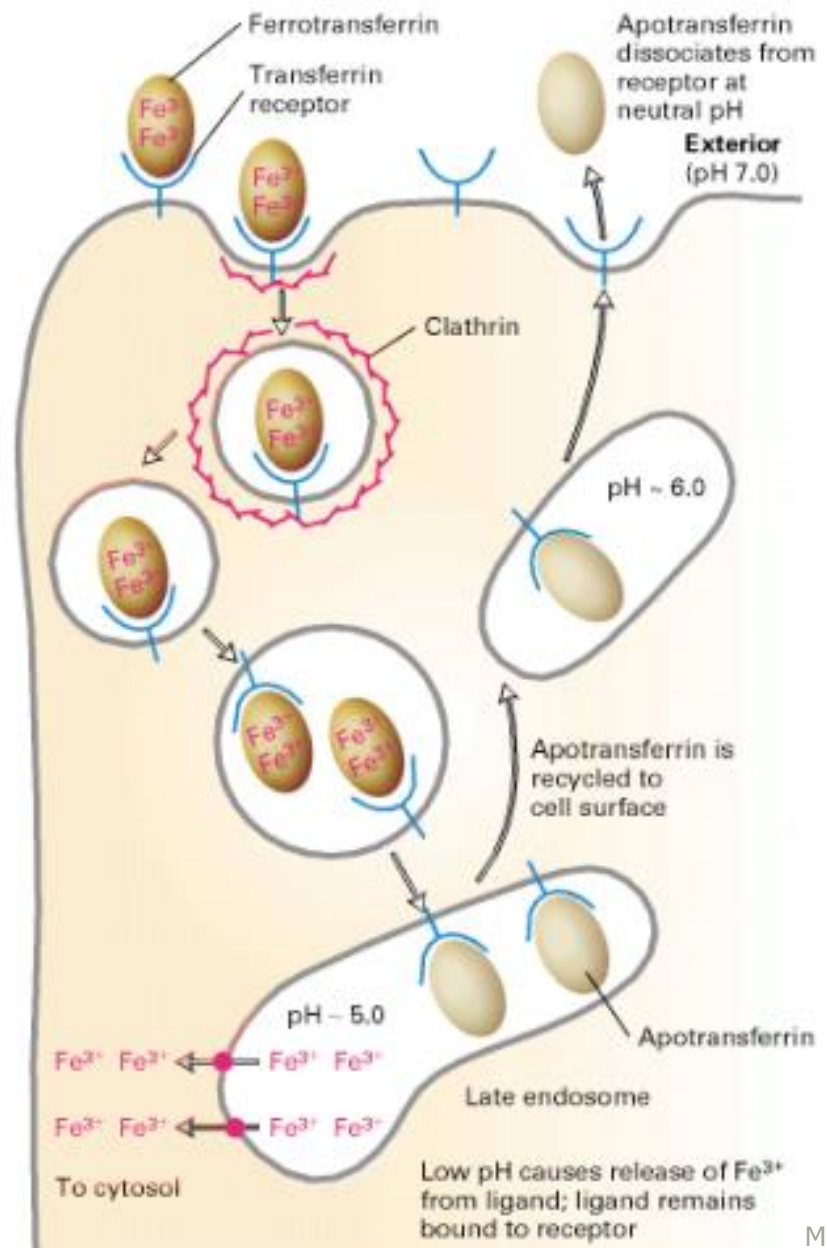
## Fermeture de la vésicule à clathrine

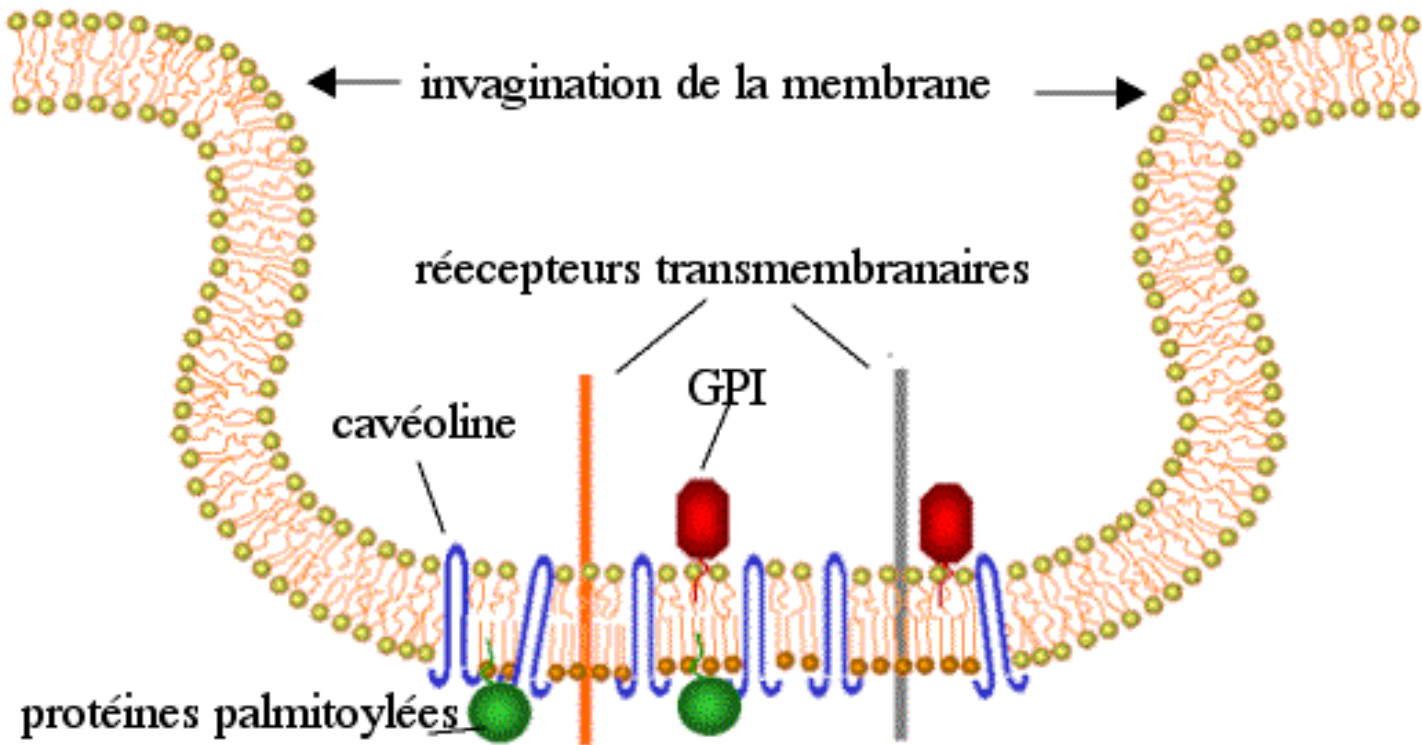
les clathrines s'assemblent en triskélions, les triskélions s'assemblent en structure charpente formant le manteau de la vésicule





**1 . Endocytose des LDL (médiée par récepteurs)  
et recyclage des récepteurs**



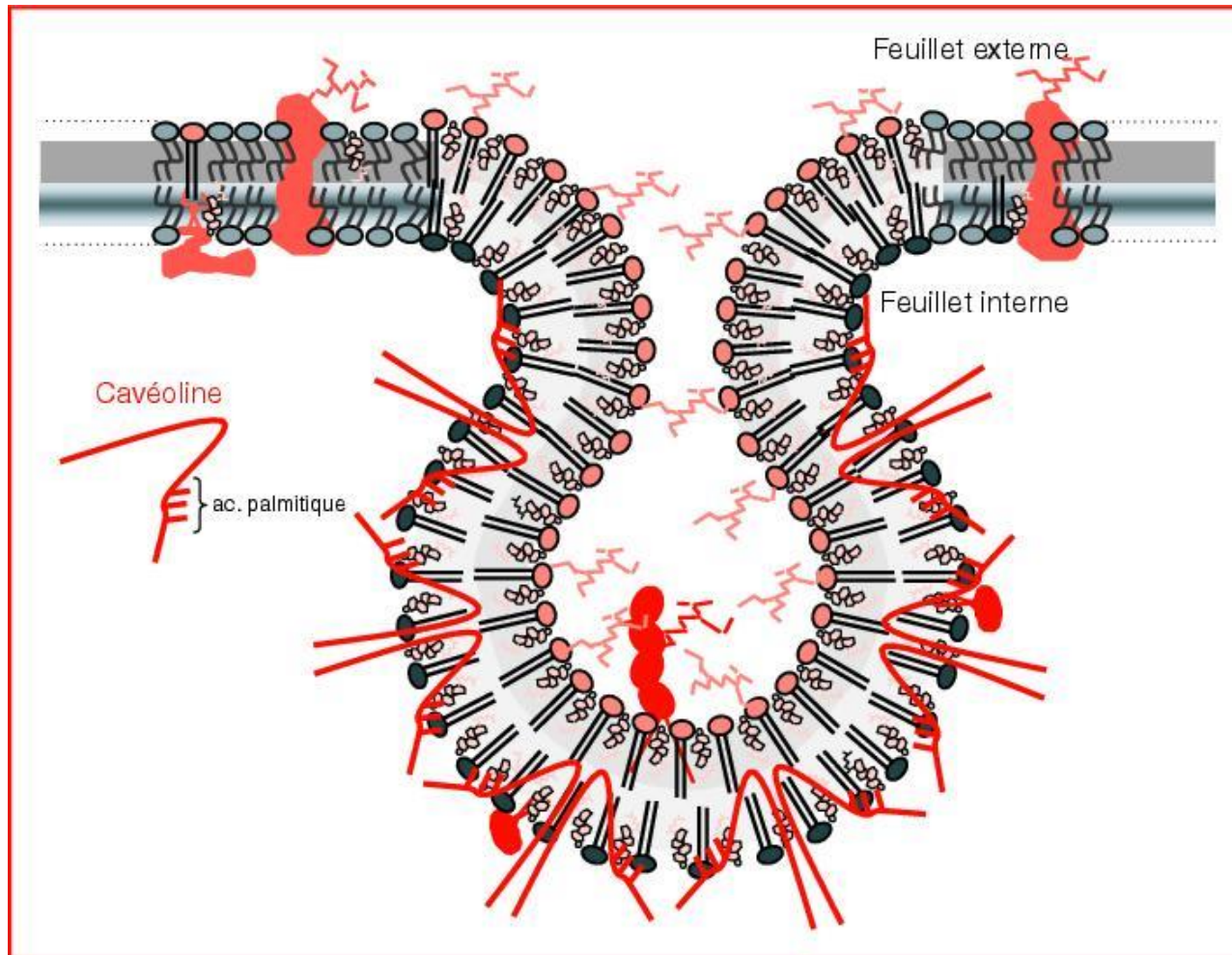


## Les cavéoles





**Caveoles, ME**

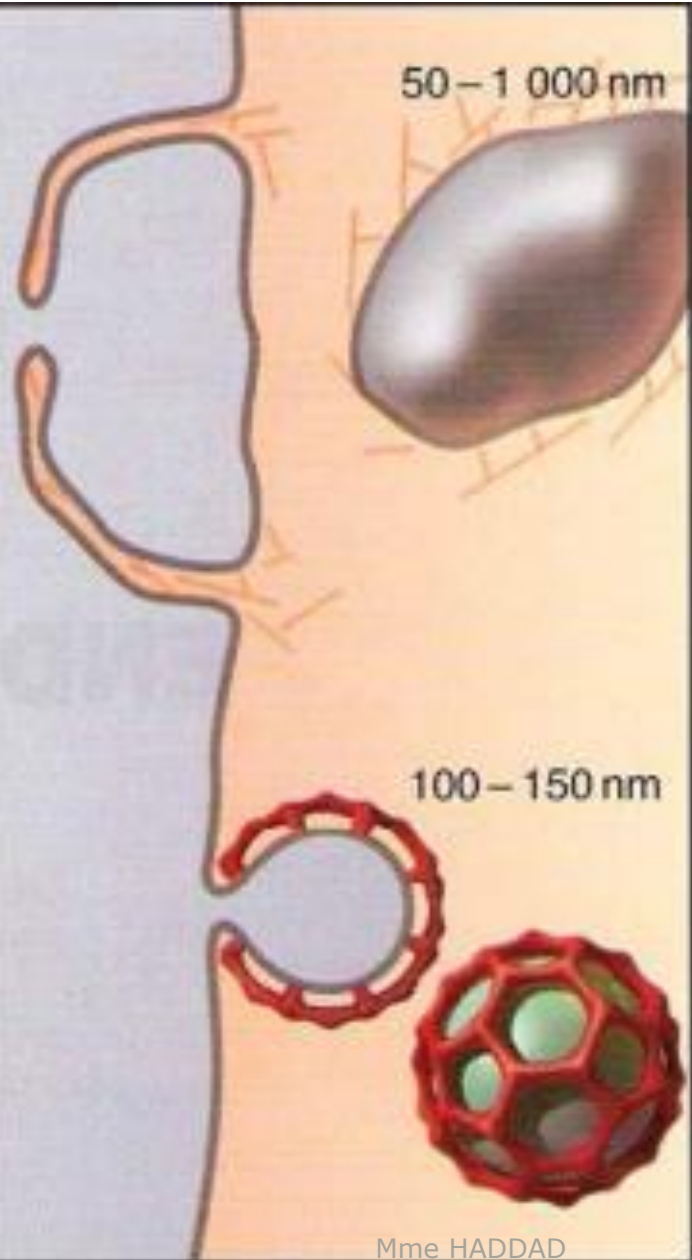


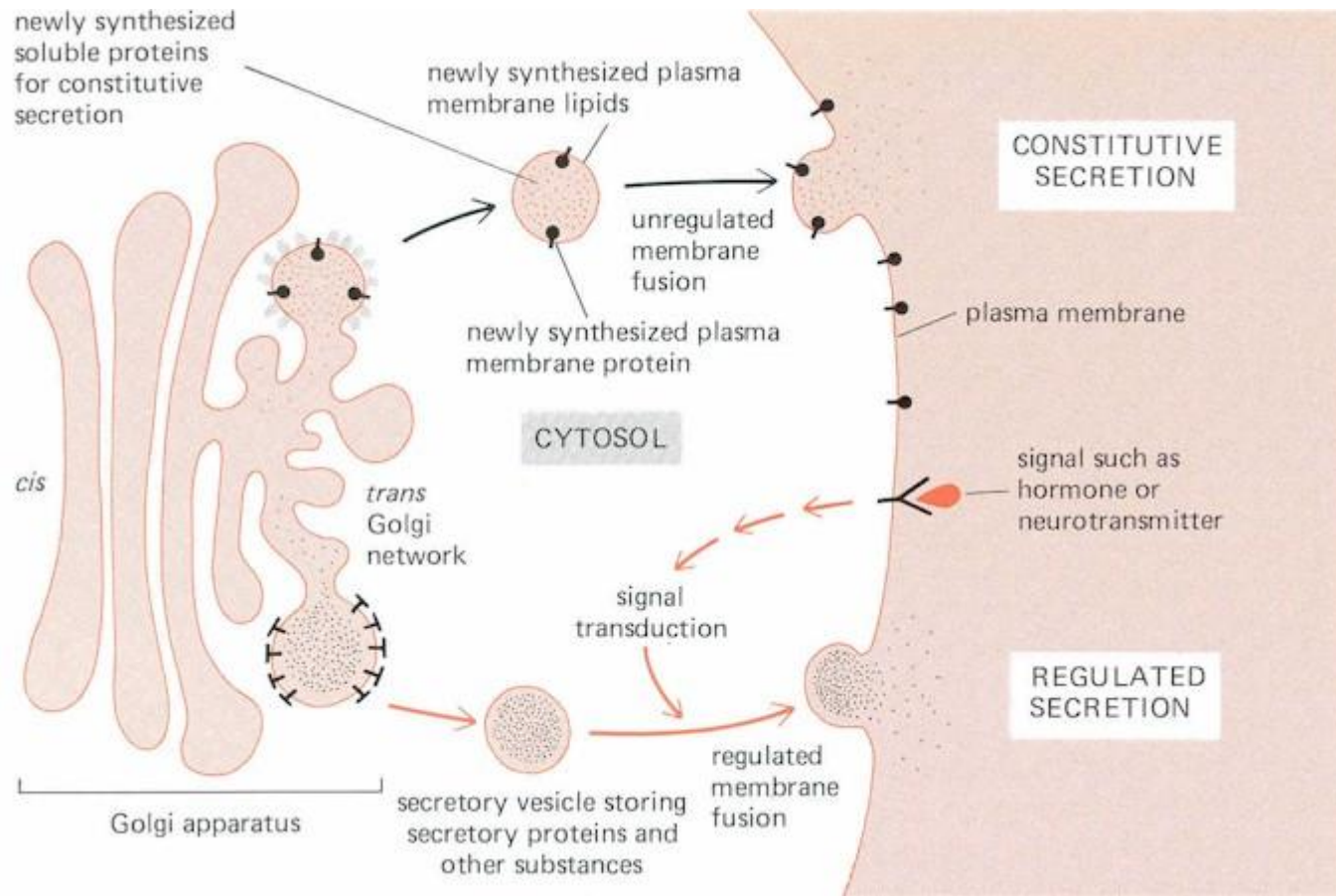
## Les cavéoles

### A. Macropinocytose



### B. Vésicule à clathrine





## Les voies de sécrétion