

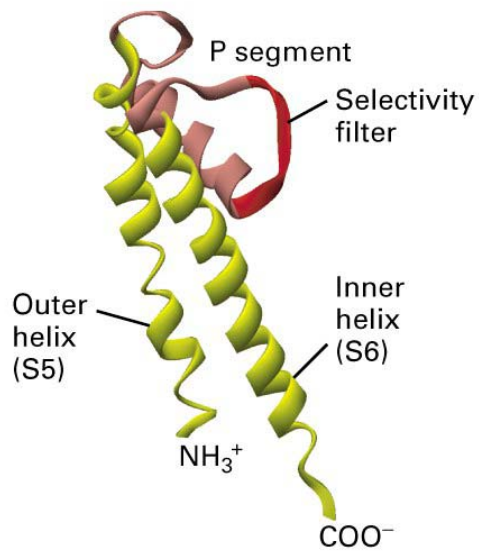
TABLE 7-2**Typical Intracellular and Extracellular Ion Concentrations**

Ion	Cell (mM)	Blood (mM)
SQUID AXON (INVERTEBRATE)*		
K^+	400	20
Na^+	50	440
Cl^-	40–150	560
Ca^{2+}	0.0003	10
$X^{-†}$	300–400	5–10
MAMMALIAN CELL (VERTEBRATE)		
K^+	139	4
Na^+	12	145
Cl^-	4	116
HCO_3^-	12	29
X^-	138	9
Mg^{2+}	0.8	1.5
Ca^{2+}	<0.0002	1.8

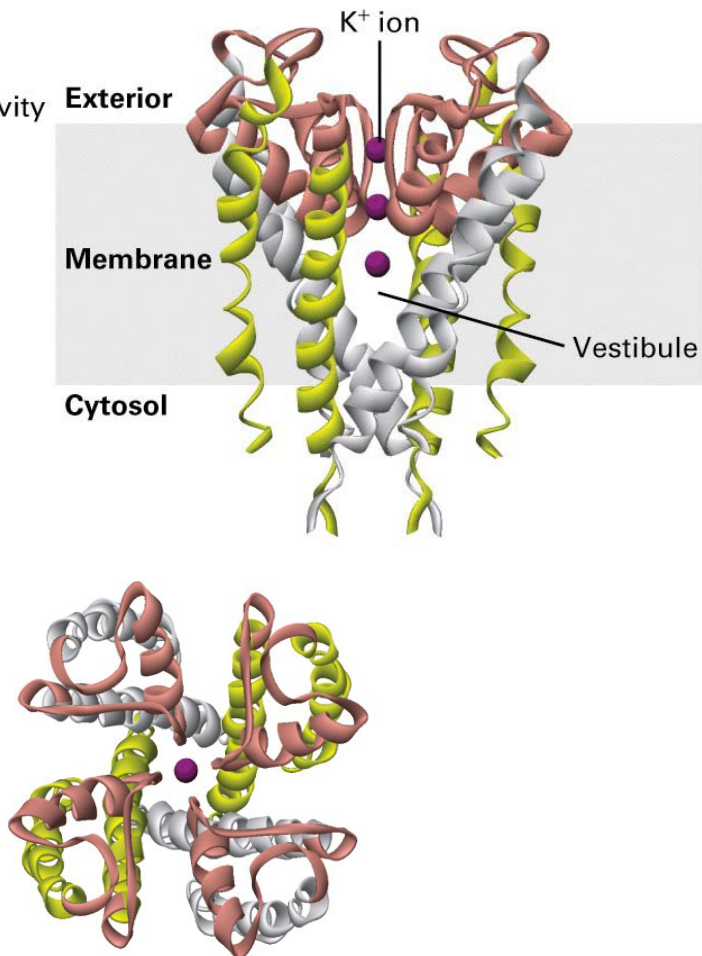
*The large nerve axon of the squid has been widely used in studies of the mechanism of conduction of electric impulses.

$^{\dagger}X^-$ represents proteins, which have a net negative charge at the neutral pH of blood and cells.

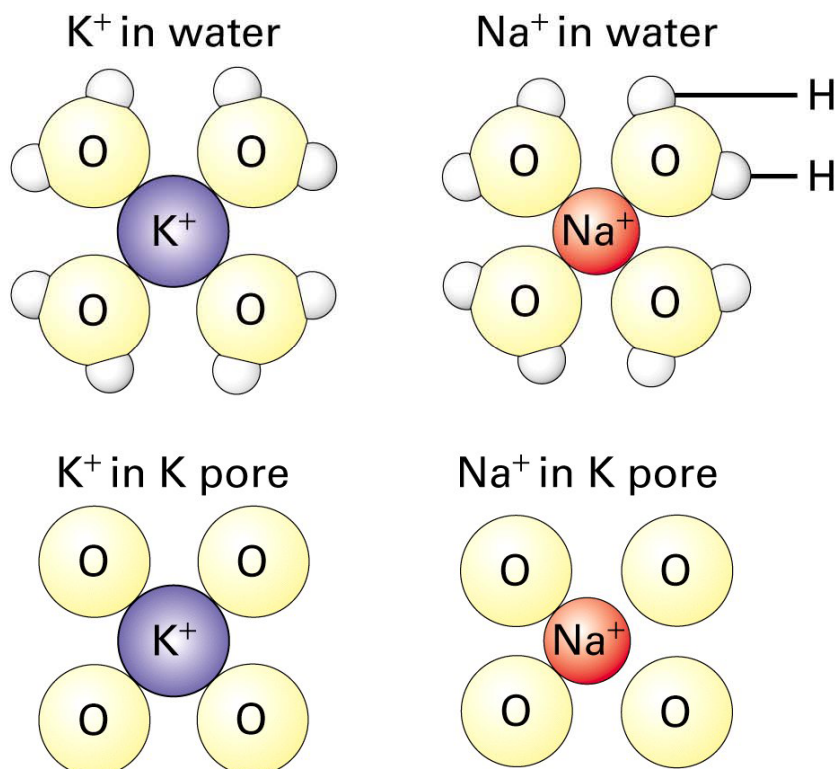
(a) Single subunit



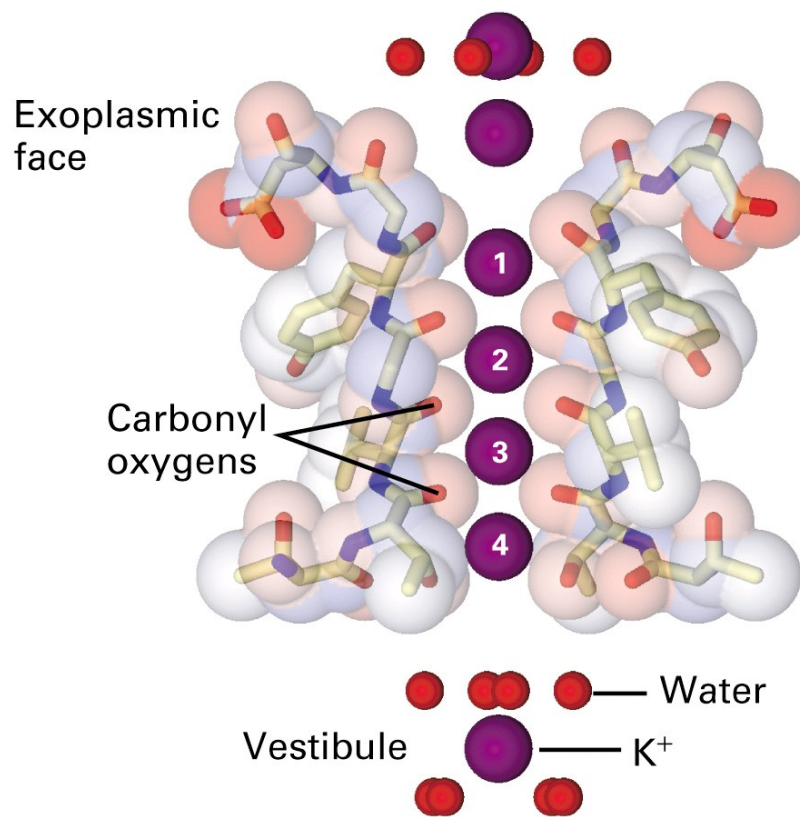
(b) Tetrameric channel



(a) K⁺ and Na⁺ ions in the pore of a K⁺ channel (top view)

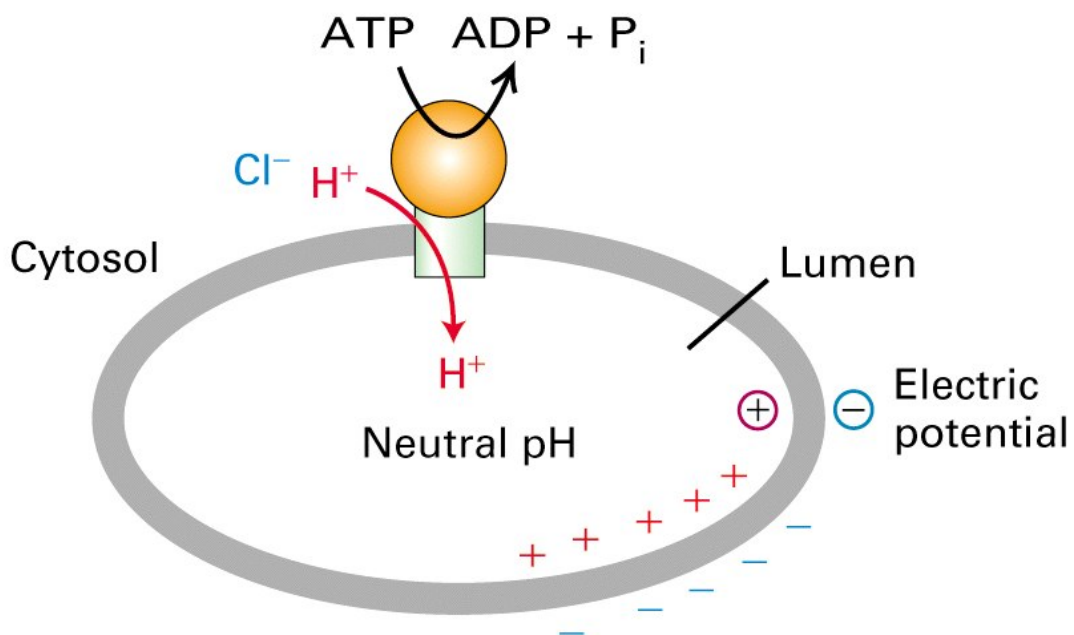


(b) K^+ ions in the pore of a K^+ channel (side view)

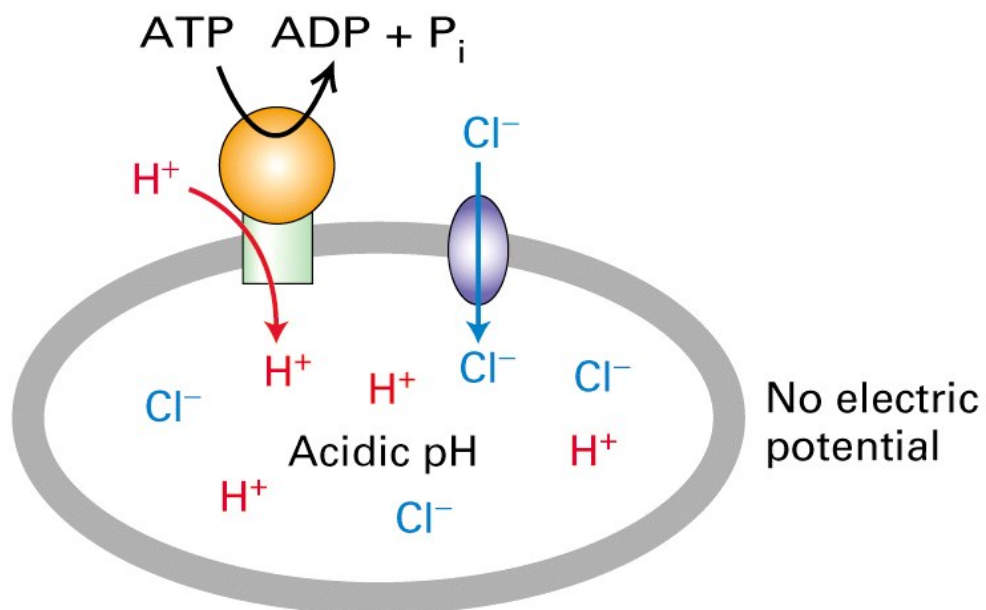


ACIDIFIKACE LUMEN LYSOSOMU/VAKUOLY

(a)



(b)



- Vyrovnání náboje

LIPOSOMY, UMĚLÉ MEMBRÁNY

- specifita transportu

