Table 6. Physical constants and ionic concentrations

| Parameter | Definition | Value |
|---|---|---|
| $C_m$ | Cell capacitance | $1.25 \times 10^{-4}$ $\mu$F |
| $F$ | Faraday constant | 96,490 C/mol |
| $R$ | Universal gas constant | 8.315 $\text{mol}^{-1}\text{K}^{-1}$ |
| $T$ | Temperature | 308 K |
| $[Na^+]_o$ | External sodium concentration | 140 mM |
| $[Na^+]_i$ | Internal sodium concentration | 10 mM |
| $[K^+]_o$ | External potassium concentration | 4 mM |
| $[K^+]_i$ | Internal potassium concentration | 149.4 mM |
| $[Ca^{2+}]_o$ | External calcium concentration | 1.8 mM |
| $v_i$ | Cell volume | $25.84 \times 10^{-6}\mu$l |
| $v_s$ | Submembrane volume | 0.1 $v_i$ |