

BioSystems 37 (1996) 253



Corrigendum

Corrigendum to "Does a cell perform isoelectric focusing?" [BioSystems 24 (1990) 127]

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Received 21 November 1995

The Author regrets that there was a serious numerical error in the above paper. The correct value for the resistance of S. cerevisiae interior is $1.85 \ 10^{10} \ \Omega$, i.e. approximately eight orders of magnitude higher than originally claimed. If the correct value is substituted into Eq. 1, we find that S. cerevisiae cell can maintain an intracellular difference of electric potential equal to about $0.29 \ V$ which represents an electric field of about $1.5 \ kV/cm$. The correct value suggests that the cell can achieve highly effective isoelectric focusing of intracellular proteins and organelles by using a negligible fraction of its energy reserves.

The author thanks Dr. Stephen Bolsover of the University College London for finding the error.