

ERRATA

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The following paper was inadvertently published in an issue of Nucleic Acids and Protein Synthesis. Interested readers should refer to Biochim. Biophys. Acta 656, 177–182.

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Ni²⁺, A NEW INHIBITOR OF MITOCHONDRIAL CALCIUM TRANSPORTERZSÉBET LIGETI^a, JUDIT BODNÁR^a, ÉVA KÁROLY^a and ERNŐ LINDNER^b

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Key words: Ni²⁺ effect; Ca²⁺ transport; Respiration; Volume change; (Rat liver mitochondria)

1. The effect of Ni²⁺ on respiration, volume changes and Ca²⁺ movements was investigated in rat liver mitochondria. 2. Ni²⁺ inhibited Ca²⁺ uptake into respiring mitochondria, Ca²⁺-stimulated respiration and swelling in Ca²⁺ salts, whereas it did not inhibit either state 4 and DNP-stimulated respiration, or swelling in K⁺ salt in the presence of valinomycin. 3. The inhibitory concentration of Ni²⁺ depended strongly on the applied Ca²⁺ concentration. As revealed by direct methods, 50% inhibition of Ca²⁺ influx was achieved by approx. 2-fold excess of Ni²⁺. 4. If added to Ca²⁺-loaded mitochondria, Ni²⁺ gave rise to slow Ca²⁺ release and inhibited uncoupler-induced efflux slightly. 5. It is concluded that Ni²⁺ is a potent inhibitor of mitochondrial Ca²⁺ transport. Ca²⁺ influx is far more sensitive to inhibition than Ca²⁺ efflux.

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pp. 452–465, for 'direct continuous' read 'direct background'

p. 461, left-hand column, line 7 from bottom, for '22' read '23'

p. 462, right-hand column, line 31, omit '(1/ω)'

line 32, for '10 μM' read '(10/ω) μM'

p. 463, Eqn. A7 should read:

$$[Z] = [\tilde{Z}]_0 \cdot e^{-\sqrt{\omega/2D} \cdot x} \cos\left(\omega t - \sqrt{\frac{\omega}{2D}} \cdot x - \delta\right)$$

p. 463, right-hand column, line 21, the equation should read:

$$2\sqrt{\frac{D}{D_g}} / \left(K \cdot \sqrt{\frac{D}{D_g}} + 1 \right)$$

p. 463, right-hand column, Eqn. A8, for '+ δ' read '− δ'

line 7 from bottom, for '8' read 'A8'

p. 464, right-hand column, line 5, for '3 · 10⁴' read '3 · 10⁵'

p. 464, right-hand column, line 8, for '√ω / 2D · l' read '√ω / 2D · l'

line 10, for 'k_i / √k_i² + ω²' read 'k_i / √k_i² + ω²'line 21, for '10^{−8}' read '0.5 · 10^{−8}'line 23, for '10⁴' read '10⁵'

line 24, for '60' read '360'

p. 465, Ref. 23, for '(1981)' read '(1881)'