mt-Membrane potential

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High-resolution respirometry: mt-membrane potential

Use of Safranin for the Assessment of Mitochondrial Membrane Potential by High-Resolution Respirometry and Fluorometry

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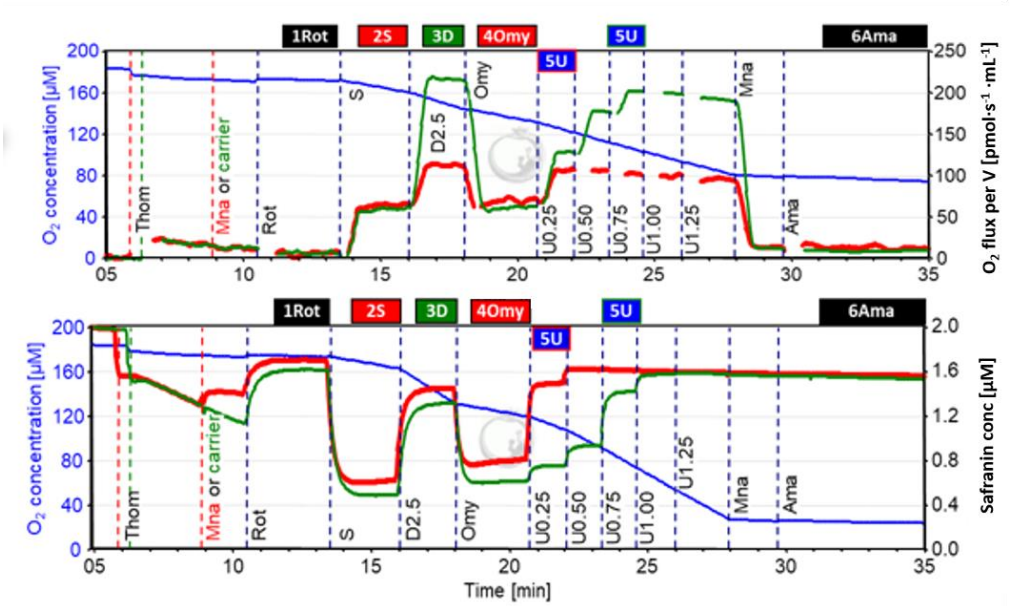
Simultaneous measurement of O_2 flux and mt-membrane potential with safranin using high-resolution respirometry and O2k-Fluorometry



Detection of CII injury (Malonate;Mna) Combined measurement of HRR and O2k-Fluorometry in a model for a pathological condition compared to the controls. Oxygen concentration (blue) and superimposed plots of oxygen flux (upper panel) and safranin concentration calibrated before addition of control and Mna-treated tissue homogenate (lower panel). Safranin was titrated before addition of mouse brain homogenate (Thom). Carrier (H_2O) or 0.2 mM Mna (inhibiting succinate-linked OXPHOS by 50%) was added before starting the SUIT protocols.

Reference: Krumschnabel G, Eigentler A, Fasching M, Gnaiger E (2014) Use of safranin for the assessment of mitochondrial membrane potential by high-resolution respirometry and fluorometry. Methods Enzymol 542:163-81.

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