

High-Resolution Respirometry of cancer cells: normoxia and hypoxia

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Endogenous Myoglobin in Breast Cancer Is Hypoxia-inducible by Alternative Transcription and Functions to Impair Mitochondrial Activity

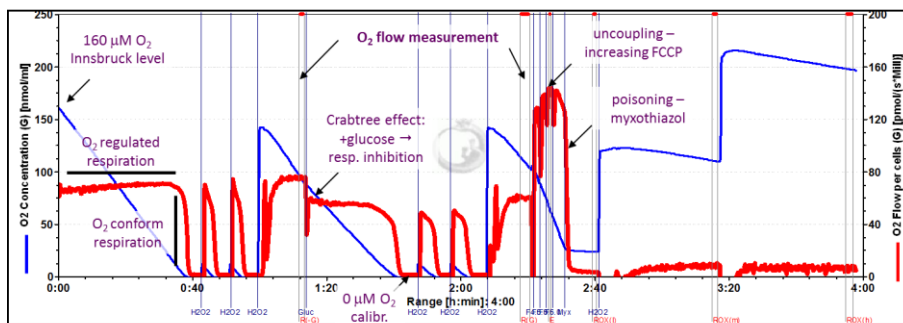
A ROLE IN TUMOR SUPPRESSION?*[S]

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Glen Kristiansen⁺¹, Junmin Hu⁵, Daniela Wichmann⁵, Daniel P. Stiehl¹, Michael Rose¹¹, Josefine Gerhardt^{**}, Annette Bohnert^{**}, Anette ten Haaf¹, Holger Moch^{**}, James Raleigh^{††}, Mahesh A. Varia^{††}, Patrick Subarsky^{5S}, Francesca M. Scandurra^{5S}, Erich Gnaiger^{5S}, Eva Gleixner¹¹, Anne Bicker¹¹, Max Gassmann⁵, Thomas Hankeln¹¹, Edgar Dahl¹², and Thomas A. Gorr^{5||12}

➤ http://wiki.oroboros.at/index.php/Kristiansen_2011_J_Biol_Chem

Representative trace of the protocol with intact cancer cells



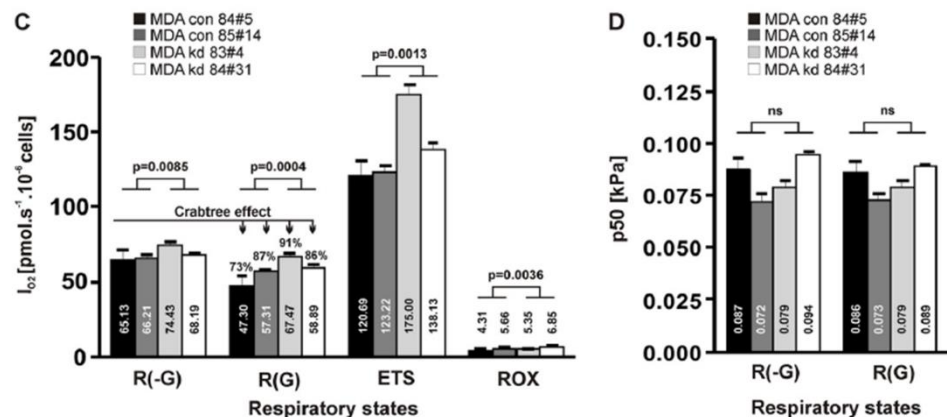
Routine respiration no glucose: R(-G); 1st transition
addtl. transitions: R(-G); catalase in medium, + H₂O₂

Routine respiration with glucose: R(G); 1st transition
addtl. transitions: R(G); catalase in medium, + H₂O₂

ETS respiration by FCCP
uncoupling: E

extramitochondrial O₂ consumption: ROX at diff. [O₂]

Respiration and oxygen kinetics as a function of respiratory state



Reference: Kristiansen G et al (2011) Endogenous myoglobin in breast cancer is hypoxia-inducible by alternate transcription and functions to impair mitochondrial activity: a role in tumor suppression? J Biol Chem 286:43417-28.