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OROBOROS INSTRUMENTS
High-Resolution FluoRespirometry and Cancer

LETTER

nature International journal of science
doi:10.1038/nature17161

Melanoma addiction to the long non-coding RNA *SAMMSON*

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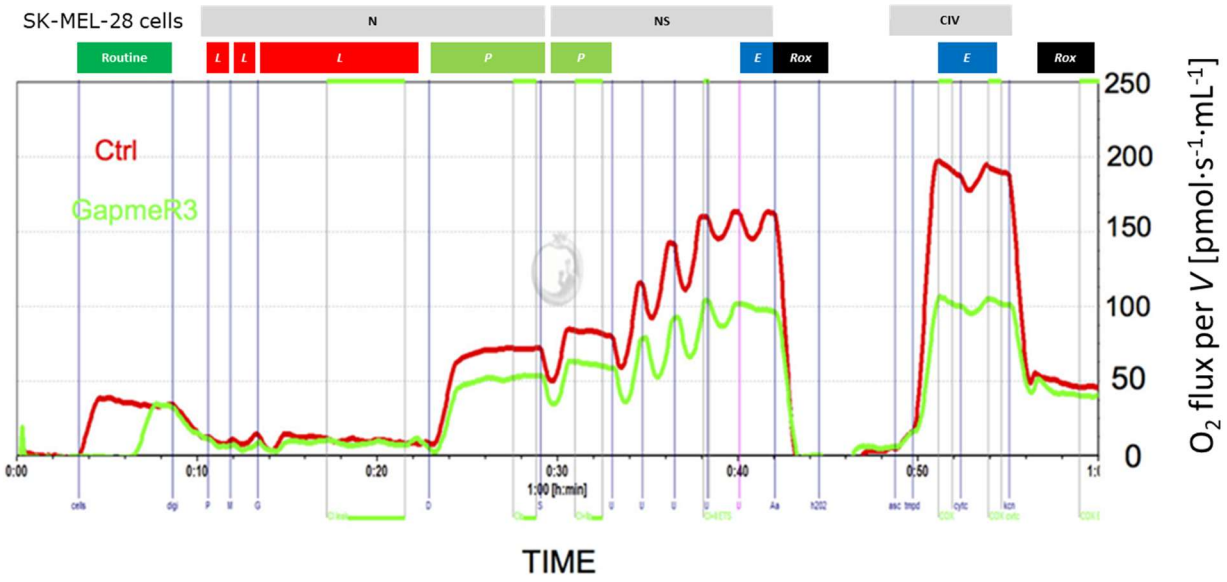
Evaluation of Complex IV activity, OXPHOS- (*P*) and ET-capacities (*E*) by High-Resolution FluoRespirometry in SK-MEL-8 cells treated with GapmeR3 (*i.e.* silencing SAMMSON using a locked nucleic acid (LNA)-modified antisense oligonucleotides)



Some cancer cells depend on OXPHOS for survival, opening the possibility to exploit the mitochondria as a therapeutic target. In melanoma, the expression of MITF-SAMMSON promotes mitochondrial respiration by inducing PGC-1 alpha. Here, the authors demonstrated that SAMMSON-silenced cells showed a decreased NADH-linked substrate OXPHOS- and ET-capacities, identifying SAMMSON as an attractive therapeutic target for the disruption of mitochondrial metabolism in melanoma

Reference: Eleonora Leucci, Roberto Vendramin, Marco Spinazzi, Patrick Laurette, Mark Fiers, Jasper Wouters, Enrico Radaelli, Sven Eyckerman, Carina Leonelli, Katrien Vanderheyden, Aljosja Rogiers, Els Hermans, Pieter Baatsen, Stein Aerts, Frederic Amant, Stefan Van Aelst, Joost van den Oord, Bart de Strooper, Irwin Davidson, Denis L. J. Lafontaine, Kris Gevaert, Jo Vandesompele, Pieter Mestdagh & Jean-Christophe Marine (2016) Melanoma addiction to the long non-coding RNA SAMMSON. Nature 531:518-22.

Figure and text slightly modified based on the recommendations COST Action MitoEAGLE CA15203. doi:10.26124/mitofit:190001