



Figure 12-figure supplement 4. Mitochondrial function parameters.

(a) Oxygen consumption rates (OCR) in HeLa cells transfected with empty vector (mock) or altMiD51^{Flag}. Mitochondrial function parameters were assessed in basal conditions (basal), in the presence of oligomycin to inhibit the ATP synthase (oxygen consumption that is ATP-linked), FCCP to uncouple the mitochondrial inner membrane and allow for maximum electron flux through the respiratory chain (maximal OCR), and antimycin A/rotenone to inhibit complex III (non-mitochondrial). The balance of the basal OCR comprises oxygen consumption due to proton leak and nonmitochondrial sources. The mitochondrial reserve capacity (maximal OCR- basal OCR) is an indicator of rapid adaptation to stress and metabolic changes. Mean values of replicates are plotted with error bars corresponding to the 95% confidence intervals. Statistical significance was estimated using a two-way ANOVA with Tukey's post-hoc test (** $p = 0,004$). (b) ROS production in mock and altMiD51-expressing cells. Cells were untreated, treated with a ROS inducer or a ROS inhibitor. Results represent the mean value out of three independent experiments, with error bars corresponding to the standard error of the mean (s.e.m.). Statistical significance was estimated using unpaired T-test. (c) ATP synthesis rate in mock and altMiD51-expressing cells. No significant differences in ATP production were observed between mock and altMiD51 transfected cells.

Results represent the mean of three independent experiments (8 technical replicates each). Error bars represent the standard error of the mean. At the end of the experiments, cells were collected and proteins analyzed by western blot with antibodies against the Flag tag (altMiD51) or actin, as indicated, to verify the expression of altMiD51. A representative western blot is shown on the right. Molecular weight markers are shown on the left (kDa).