

Activation of Mitochondrial 2-Oxoglutarate Dehydrogenase by Cocarboxylase in Human Lung Adenocarcinoma Cells A549 is p53/p21-Dependent and Impairs Cellular Redox State, Mimicking the Cisplatin Action

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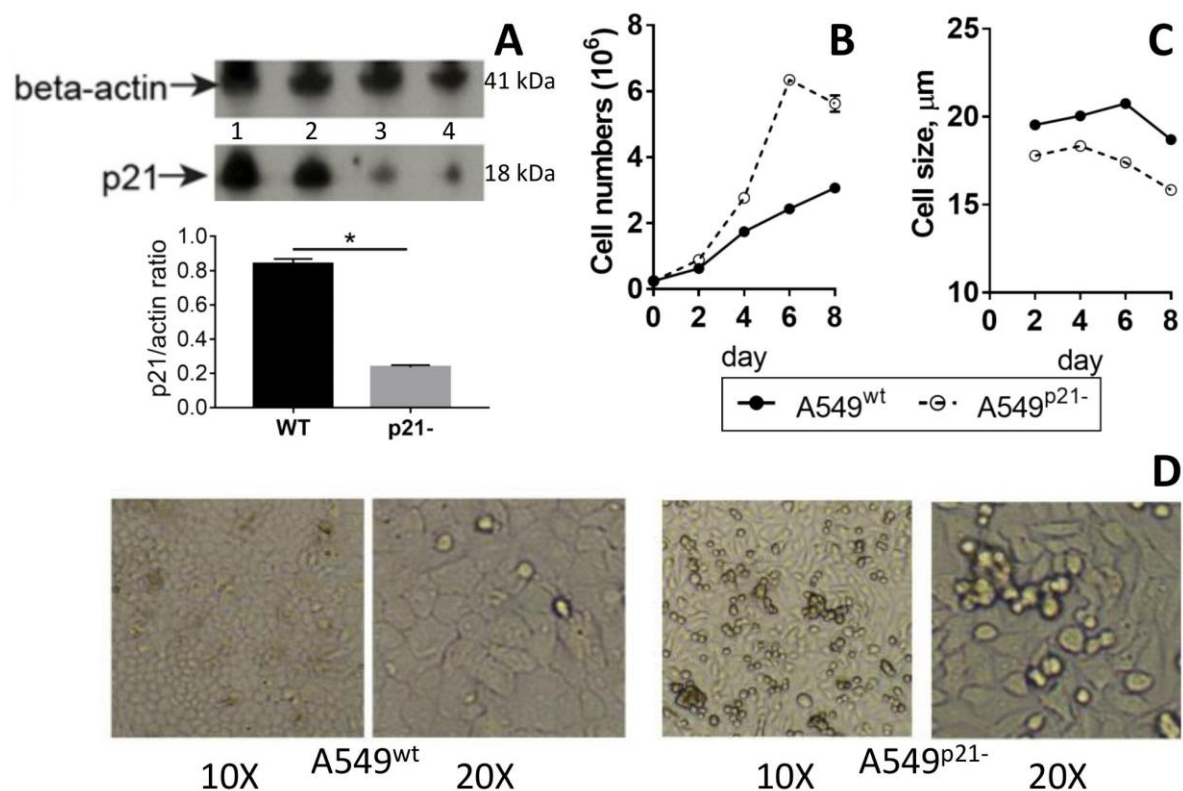


Figure S1. Comparison of A549^{p21-} and A549^{wt} cells. 25000 cells were seeded in 6-well plates and cultured in standard DMEM. **A.** The levels of p21 and beta-actin proteins, detected by Western blotting in A549^{p21-} cells (lanes 3, 4), compared to A549^{wt} cells (lanes 1, 2). Quantification was done using ImageJ2 (<https://imagej.net/ImageJ2>). The data are presented as mean ± SEM (*, $p < 0.05$ by unpaired t test with Welch's correction). **B.** Time-dependence of the cell number. **C.** Time-dependence of the cell diameter **D.** Images of the cell morphology at 10x and 20x zooming.

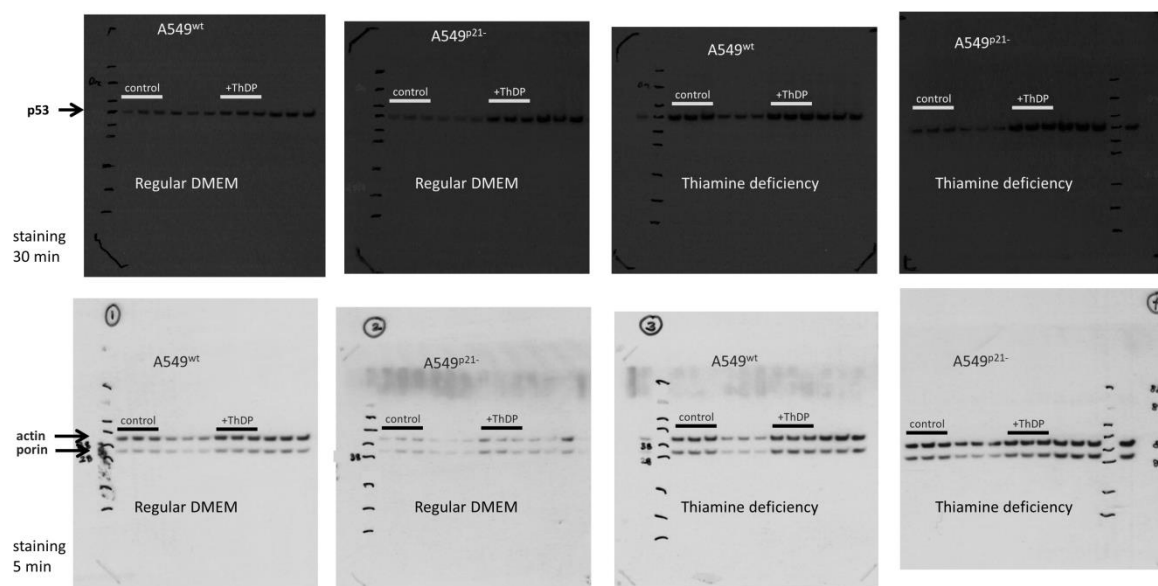


Figure S2. Uncropped western blots on the p53 levels (upper blots) and normalization to actin and VDAC/porin (bottom blots) under varied ThDP saturation in A549^{wt} (1st and 3rd columns) and A549^{p21-} (2nd and 4th columns) cells. Conditions of the cell cultures are as indicated on the blot pictures: the regular DMEM (1st and 2nd columns) or the thiamine deficient DMEM (3rd and 4th columns). +ThDP – addition of 5 mM ThDP.