Figure S2 A

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MV4;11 kDa . PGP 35 HSP60 55. PGP.2 PGP.4 NT MV4;11 100 HK2 -----55. HSP60 HK2.2 HK2.3 NT

KDa MV4;11 35 PGP 55 MV4;11 100 MV4;11

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Figure S2| (related to Figure 2). Genome wide CRISPR screen identifies cellular metabolism and mitochondrial homeostasis as key regulators of ironomycin activity. A-C, FACS plot showing MV4;11 transduced with lentiviral vectors expressing 6 different fluorochromes. Cells were treated with DMSO (A), 200 nM ironomycin (B) or 50 nM venetoclax (C). After three days, the samples were collected, counted and a small portion was used for FACS analysis. At this stage 100K cells from each well were isolated, washed with PBS and transferred to 6 well plates. The cells were cultured for 6 additional days in absence of drugs and a small proportion was used for FACS analysis (n=3 biological replicates). D, FACS plots showing OCI-AML3 Cas9 cells at baseline, day 7 and day 10 in a CRISPR screen replicate (1a). ironomycin (500 nM) induced a strong cell death induction with few surviving cells at day 7. At day 10 reappearance of mCherry positive cells confirmed that a population of resistant OCI-AML3 Cas 9 cells was still expressing selected single guides RNAs (sgRNA) from the CRISPR library. This cell population was collected at day-14 and sequenced. E, Immunoblot showing protein expression in MV4;11 expressing Cas9 transfected with a nontargeted sgRNA (NT) and two independent sgRNAs targeting either PGP or HK2. F, Immunoblot showing protein expression of PGP and HK2 in MV4;11 cells with or without ironomycin for 24 hours.